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MICROMETRICAL MEASURES OF NEBULAE

1905 to 1910

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By

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DIRECTOR.

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Preface.

THE sixteen-inch Clark refractor was mounted in the spring of 1904. The remainder of that year was spent in testing the telescope and in making miscellaneous observations of planets and comets. It was then decided to take up systematic work along the line of observing those nebulae of Dreyer's New General Catalogue which lie south of the equator. This would give the opportunity of repeating the measures made in 1884–86 with the old eleven-inch, and of furnishing accurate positions of many nebulae too far south to be readily reached by European observers.

After the work was well under way it was learned that M. Bigourdan of the Paris observatory had undertaken the re-observation so far as possible of all the N. G. C. nebulae. A comparison of that part of his results already published indicates that about one-fifth of the nebulae measured here were not secured at Paris. These are for the most part objects far to the south. It is also true that M. Bigourdan measured a considerable number of nebulae south of the equator not contained in the present catalogue. As a matter of fact these objects were usually glimpsed and could have been measured on the few really clear nights which we have at Cincinnati; but in order to finish the work within a reasonable time it was necessary to use many nights when the sky was more or less affected by smoke or vapor. Unless a nebulae could be seen well enough to render the determination of its position fairly certain no attempt was made to make micrometrical settings on it. Frankly the conditions here are not favorable to work on very faint objects. Such investigations can be much more profitably carried on at stations remote from large cities and in climates where the air is freer from vapor.

For a considerable number of nebulae the positions here recorded are the first accurate ones published. The discovery of new objects was no part of the program, but a few were run across incidentally. Of the seventeen designated Novae nine are certainly new so far as I am aware. The rest are probably identical with N. G. C. numbers, as will be seen from the notes. Where the discrepancy was greater than half a minute of time I have retained the designation Nova.

In this connection I can not forbear contrasting the work of the Herschel's in this field with that of some modern observers. While there are errors in the Herschelian positions, the percentage is remarkably small. On the other hand out of thirty-one nebulae catalogued by Lewis Swift which I have remeasured, only one comes within reasonable limits of error, and in several cases the discordance is so great as to make identification doubtful.

From June, 1905, when the work was commenced, until March, 1906, a bar micrometer was employed. This micrometer, which had been previously used to some extent in comet observations, consists of three bars crossing each other at angles of 60°. One bar is used for orienting the instrument, and transits are taken over both edges of the others. In all cases the comparison star was so chosen as to pass the same side of the center as the nebula, and sets were taken both above and below the center. In this way practically all constant error is eliminated. Upon the installation of the new filar micrometer constructed by Saegmuller, however, these measures were all repeated.

PREFACE

Each night's observation of a nebula with the filar micrometer consisted in from two to four measures of the difference of declination, and at least two sets of transits recorded on the chronograph, two wires being used in each set.

Great pains has been taken to secure reliable positions of the comparison stars. If no modern catalogue position was available the star used was either determined with our meridian circle, or, if too faint, compared micrometrically with other stars. For the meridian circle observations of comparison stars I am indebted to Dr. Elliott Smith. At least two observations of each star have been made. Final positions of these stars will be incorporated in the Cincinnati Catalogue for 1910.

In the following pages are given:

1. The micrometrical measures of comparison stars. The differences have been reduced for precession to 1900.

2. The complete list of comparison stars for 1900. The numbers in the last column after the equatorially determined stars refer to the first table.

3. The micrometrical measures of nebulae, the differences being first given as observed, and then in connection with the comparison star the mean value reduced to 1900 for precession and where necessary proper motion.

4. The resulting catalogue of nebula positions.

October, 1910. JERMAIN G. PORTER.

Micrometrical Measures of Comparison Stars.

No.	Epoch of Comparison.	Δ α 1900.	Δ δ 1900.	Star Compared With		Authority.
				α 1900.	δ 1900.	
		M. S.	′ ″	H. M. S.	° ′ ″	
1	1905.9	+ 7 18.70	+ 5 04.1	0 22 31.02	—32 22 57.6	Cor. G. C. 369, Cape 80 161
2	1905.9	+ 4 19.77	— 1 47.2	25 55.78	—10 38 11.6	Cor. G. C. 431, R_3 97
3	1905.9	+ 2 12.03	— 7 31.9	28 03.34	—10 32 22.3	Cin. 1910
4	1905.9	— 1 34.93	— 3 14.3	34 17.37	—20 24 37.3	Cin. 1910
5	1908.9	+ 3 48.48	+14 34.8	31 01.56	—15 31 19.8	R_3 114, W. Z.
6	1905.9	+ 3 59.86	— 0 20.1	0 51 08.99	— 8 06 59.7	A G_2 II 191
7	1909.9	+ 0 18.28	+14 15.7	55 48.48	— 9 54 46.8	A G_2 II 206
8	1906.0	— 0 15.33	—11 29.5	1 43 45.46	—15 15 46.8	Bord. 358, W. Z., Cin. 1910
9	1907.9	— 0 31.31	—11 12.1	49 01.48	— 9 08 45.9	A G_2 II 391
10	1906.9	— 4 05.15	+ 2 08.8	55 42.90	—30 21 00.9	Cor. Z. 1^h, 1443
11	1907.9	+ 1 14.42	— 9 35.5	1 56 55.62	—10 14 29.7	Cin. 1910.
12	1907.9	— 0 58.23	—19 08.0	2 10 05.85	— 0 52 56.1	A G_1 XV 447
13	1907.9	— 2 46.54	+11 25.0	19 39.64	— 6 20 46.3	A G_2 II 530
14	1908.0	+ 2 35.82	+ 9 23.8	17 40.48	—25 39 13.7	Cor. G. C. 2429
15	1906.0	— 4 10.92	+ 0 53.8	27 03.11	— 1 38 13.5	A G_1 XV 513
16	1906.0	— 2 02.91	+ 2 41.2	2 44 05.06	— 8 06 00.8	Cin_1 343, A G_2 II 631
17	1908.0	+ 2 09.98	+ 7 55.7	46 13.62	—10 39 52.0	Cin. 1910
18	1908.0	+ 3 00.34	+17 36.4	46 13.62	—10 39 52.0	Cin. 1910
19	1910.0	— 0 24.81	—14 25.3	3 00 22.47	—26 10 04.3	Cor. G. C. 3325
20	1909.0	+ 2 10.94	—10 18.4	2 57 50.72	—15 40 02.4	Bord. 640, W. Z.
21	1909.0	— 1 27.81	+11 24.8	3 04 33.60	— 1 23 05.7	A G_1 XV 669
22	1906.0	+11 59.55	— 2 39.5	2 54 41.82	—11 04 51.6	Cin. 1910
23	1906.0	— 0 21.07	—18 36.5	3 07 02.46	—10 48 53.2	Cin. 1910
24	1909.0	— 0 55.11	+ 7 28.6	19 57.46	—22 01 11.6	Cin. 1910
25	1908.0	— 1 31.11	— 1 47.4	24 51.42	—21 42 55.8	Cin_1 403
26	1908.1	+ 2 50.62	+ 4 09.6	3 31 17.19	—26 45 45.1	Cor. G. C. 3947
27	1906.1	— 4 46.55	+ 0 07.1	45 18.94	— 4 11 30.4	A G_2 I 951
28	1910.1	+ 2 35.23	+ 0 32.5	38 15.20	—22 17 53.6	Cin. 1910
29	1906.1	+ 2 00.26	+12 17.1	38 55.80	— 4 35 45.2	A G_2 I 922
30	1906.1	— 4 22.76	—11 58.0	45 18.94	— 4 11 30.4	A G_2 I 951
31	1910.0	+ 3 05.92	+ 3 54.6	3 40 37.23	—16 43 28.3	Bord. 788, W. Z.
32	1906.1	+ 1 43.98	+ 6 30.1	4 36 34.94	— 2 38 36.2	A G_2 I 1236
33	1906.1	— 3 08.30	— 8 11.7	41 27.39	— 2 23 53.3	Cin. 1910
34	1910.1	+ 0 34.87	+ 8 13.3	5 16 18.13	—11 42 54.7	Cin. 1910
35	1906.1	— 0 44.26	— 0 31.9	6 55 18.60	— 7 39 07.2	Cin_1 692, A G_2 II 2329
36	1907.1	+ 1 09.12	+ 5 32.1	7 19 12.13	—27 27 11.8	Cin. 1910
37	1910.1	— 0 10.30	+ 4 59.4	9 18 53.29	—22 39 19.3	Cin. 1910
38	1910.3	+ 2 23.38	— 5 18.6	30 00.36	—11 40 45.8	Cin_1 882, Cin. 1910
39	1906.2	— 1 32.75	— 8 22.6	46 26.80	— 4 30 12.0	A G_2 I 3835
40	1906.0	+ 1 06.87	+18 35.8	11 25 18.67	—13 54 31.8	Cin. 1910

No.	Epoch of Comparison.	Δ α 1900.	Δ δ 1900.	Star Compared With		Authority.
				α 1900.	δ 1900.	
		M. S.	′ ″	H. M. S.	° ′ ″	
41	1908.3	+ 2 41.58	+ 3 15.9	11 24 34.02	— 9 30 40.2	A G_2 II 4303
42	1907.4	+ 1 46.55	—14 01.7	12 40 46.21	— 2 29 04.1	A G_2 I 4675
43	1906.4	+ 0 05.14	+13 48.6	48 42.21	— 6 31 01.0	A G_2 II 4669
44	1907.4	— 2 37.66	+ 6 14.5	52 21.82	—12 16 12.4	Cin_2 1084
45	1907.4	— 2 02.56	+ 3 38.6	57 38.02	—14 02 57.5	Cin. 1910
46	1907.4	— 1 59.25	+ 5 57.7	12 57 38.02	—14 02 57.5	Cin. 1910
47	1908.4	— 0 21.34	+ 8 58.3	13 10 29.05	—15 44 46.1	Bord. 3986, W. Z., Cin. 1910
48	1908.4	+ 1 24.18	+ 7 02.2	23 51.13	—17 30 45.3	Cin. 1910
49	1906.4	— 1 18.65	— 2 03.4	30 44.81	— 0 27 10.8	A G_1 XV 3606
50	1906.4	— 1 42.12	— 4 07.6	31 08.16	— 0 25 07.3	Cin_2 1167, Cin. 1910
51	1906.5	+ 3 12.19	— 4 32.4	14 02 59.16	— 0 34 18.9	A G_1 XV 3692
52	1910.3	+ 3 34.25	+ 6 18.6	51 23.83	—13 50 36.7	Cin. 1910
53	1905.5	— 1 16.25	+ 3 42.4	15 04 32.05	—10 52 55.4	Cin. 1910
54	1905.5	+ 3 26.33	+12 35.6	13 26.71	— 2 26 02.4	A G_2 I 5350
55	1905.5	+ 1 15.50	—10 38.6	15 37.42	— 2 02 52.0	Cin_1 1285, A G_2 I 5361
56	1905.5	— 6 33.96	— 0 08.7	15 23 26.97	— 2 13 19.8	A G_2 I 5399
57	1905.5	+ 7 27.87	+ 3 23.9	25 01.77	—16 15 59.1	R_3 3998, Gr. II 10y 3911, W. Z.
58	1910.4	— 0 03.69	—15 05.8	42 51.28	—13 11 27.9	R_3 4076
59	1910.4	— 1 00.70	+13 23.4	43 48.43	—13 39 55.1	Cin. 1910
60	1906.8	+ 0 05.15	+14 37.8	21 27 57.03	— 1 47 45.1	A G_2 I 7528
61	1906.8	— 1 25.12	+ 6 06.8	22 17 07.35	—16 21 16 9	W. Z., Cin. 1910
62	1906.8	— 2 32.30	— 9 48.0	18 14.37	—16 05 23.8	Bord. 6597, W. Z., Cin. 1910
63	1906.8	+ 3 50.72	— 3 03.0	24 40.74	—13 25 37.7	R_3 6034, Gr. II 10y 6284, Cape 00 3124
64	1906.8	— 0 03.50	+ 9 33.5	39 10.15	— 1 02 37.8	A G_1 XV 5711
65	1906.8	+ 3 06.70	+ 1 43.0	49 09.63	— 1 34 50.4	A G_1 XV 5739
66	1905.8	+ 1 02.95	+10 52.2	23 27 47.01	— 3 34 06.2	A G_2 I 8083

Catalogue of Comparison Stars.

No.	Mag.	R.A. 1900	Log.	Decl. 1900	Pos.	Authority
1	8	h m s 0 04 21.40		−12 35 29.8	20.048	Cor. G. C. 700
2	8	05 37.96		− 6 13 38.8	20.046	A G. II 78
3	7	09 03.00		− 7 45 11.9	20.036	A G. II 93
4	8.5	12 41.88		− 6 42 32.1	20.021	A G. II 96
5	8	16 06.26	3.0064	− 3 52 07.8	20.003	A G. I 68
6	8.5	0 22 48.38		− 2 14 06.4	19.963	A G$_2$ I 97
7	5	22 58.19	2.9840	−33 33 33.0	19.955	Cape 50 (1903) Lab. Pl.
8	6	23 22.08	3.0654	− 3 03 58.2	19.948	A G$_2$ I 98
9	8.5	27 00.42	3.0560	− 5 43 48.5	19.913	A G. I 111
10	8	27 39.19	2.9852	−28 32 03.7	19.906	Cor. G. C. 459
11	7.5	0 28 03.35		−10 32 22.3	+19.902	Cin. 1910
12	6	28 10.36	3.0400	−11 16 49.5	19.900	Cin. 1910
13	8.5	29 33.79	3.0400	− 8 50 56.4	19.885	Cin$_1$ 57, A G$_2$ II 105
14	10	29 49.72	2.9630	−32 17 53.5	19.883	Equa. 1
15	9.5	30 15.46	[illegible]	10 39 56.5	19.878	L$_{250}$ 2 3
16	9	0 31 17.82	+3.0439	− 9 00 15.1	+19.865	A G. II 121
17	8	32 33.63	3.0406	− 9 37 25.1	19.850	A G. II 125
18	9.5	32 42.44	[illegible]	20 27 51.6	19.848	Equa. 4
19	9	33 36.98	[illegible]	−14 46 58.8	19.837	W. Z., Cin. 1910
20	9.5	34 50.04	[illegible]	15 16 45.0	19.821	Equa. 5
21	9	0 35 02.16	[illegible]	−14 26 01.8	+19.818	Cin. 1910 W. Z.
22	8.5	35 50.54	[illegible]	−10 30 33.1	19.807	Duns$_6$ 24, Cin. 1910
23	8.5	36 03.98	3.0652	− 2 03 59.6	19.804	A G$_2$ I 145
24	9	37 21.43	3.0703	0 38 56.0	19.786	A G. XV 118
25	9.5	37 55.69	[illegible]	− 4 24 16.1	19.778	A G. I 192
26	9	0 39 42.05	+3.0668	−15 56 01.5	19.774	W. Z., Cin. 1910
27	7.5	41 12.31	[illegible]	−11 59 52.8	19.750	Cin. 1910
28	9	41 37.36	3.0598	− 3 04 20.1	19.722	A G. I 196
29	10	42 25.38	[illegible]	−25 55 39.0	19.716	Cor. G. C. 722
30	9	42 40.93	[illegible]	−25 56 28.6	19.706	Cor. G. C. 724
31	9	0 42 47.78	+3.0634	− 2 08 58.8	+19.703	A G$_2$ I 171
32	9	44 31.52	3.0560	− 3 34 28.9	19.675	A G. I 178
33	9.5	45 18.27	3.0466	− 5 49 19.2	19.662	A G. I 186
34	9.5	45 41.05	3.0613	− 2 27 52.8	19.658	A G. I 182
35	8	46 34.25	3.0283	− 9 21 45.6	19.640	A G. II 168
36	9	46 45.90	+2.9965	−31 31 47.3	19.638	Cor. G. C. 776
37	9	46 51.06	3.0362	− 7 40 08.4	19.635	A G$_2$ II 172
38	9	46 56.04	3.0602	− 2 38 46.3	19.633	A G. I 188
39	8.5	47 04.42	[illegible]	−31 30 11.7	19.630	Cor. G. C. 779
40	6	59 39.43	[illegible]	− 7 53 15.6	19.564	R. 1911, A G. II 188

No.	Mag.	R.A.	Prec.	Decl.	Prec.	Authority.
		H. M. S.	S.	° ′ ″	″	
41	9	0 51 13.51	+3.0186	−10 20 56.4	+19.553	Cin. 1910
42	9	53 43.44	3.0274	− 8 17 24.7	19.504	A G_2 II 199
43	8	54 37.46	3.0459	4 51 39.7	19.485	A G_2 I 216
44	10	55 08.85	3.0265	− 8 07 19.8	19.474	Equa. 6
45	7.5	55 48.48	3.0164	− 9 54 46.8	19.460	A G_2 II 206
46	9.5	0 56 06.76	+3.0174	− 9 40 31.1	+19.454	Equa. 7
47	7.5	56 30.97	3.0307	7 20 16.7	19.445	A G_2 II 208
48	8.5	56 37.89	3.0354	− 6 30 57.0	19.443	A G_2 II 209
49	9	57 19.52	3.0577	− 2 35 44.1	19.428	A G_2 I 229
50	8	1 01 18.43	3.0648	− 1 17 00.5	19.330	A G_1 XV 213
51	8	1 06 44.38	+3.0661	0 58 38.1	+19.208	A G_1 XV 225
52	8.5	08 40.45	2.8219	−32 26 16.4	19.159	Cor. G. C. 1138
53	6	09 42.75	3.0621	− 1 30 32.8	19.132	Cin_2 86, Lick Pl. μ −0".005 μ' +0".21
54	9.5	11 31.98	3.0572	− 2 09 29.9	19.083	A G_2 I 288
55	9	14 54.83	3.0626	− 1 20 54.1	18.991	A G_1 XV 248
56	9	1 22 21.96	+3.0586	− 1 42 54.8	+18.771	A G_1 XV 276, A G_2 I 330
57	7.5	22 55.69	3.0516	− 2 33 11.7	18.754	A G_2 I 334
58	9	23 33.73	3.0507	− 1 34 15.8	18.734	A G_1 XV 277
59	8.5	24 05.01	3.0107	− 7 21 56.2	18.718	Gr. II 10y 541, A G_2 II 301
60	8	25 12.47	2.8662	−23 02 21.3	18.682	Cor. G. C. 1428
61	9	1 25 32.52	+3.0530	− 2 18 45.2	+18.671	A G_2 I 342
62	9	25 54.38	3.0603	− 1 27 17.5	18.660	A G_1 XV 286
63	8	26 09.76	3.0077	− 7 32 52.7	18.652	A G_2 II 310
64	6.5	28 40.87	3.0060	− 7 32 11.1	18.570	Cin_1 218, A G_2 II 318. μ +0".011 μ' 0".08
65	9	29 45.51	3.0020	− 7 53 14.7	18.534	Cin_1 222, A G_2 II 324
66	9.5	1 29 46.23	+2.7792	−29 53 53.0	+18.533	Cor. Z. 1^h, 759
67	8.5	35 01.78	2.9075	− 7 57 22.0	18.353	A G_2 II 340
68	9	43 30.13	2.9114	−15 27 16.3	18.042	Equa. 8
69	9	43 54.85	2.9814	− 8 51 39.4	18.026	A G_2 II 375
70	9.5	44 01.24	2.8085	−24 15 38.1	18.022	Cor. Z. 1^h, 1104
71	8.5	1 44 01.91	+2.8072	−24 22 05.8	+18.021	Cor. G. C. 1770
72	8	44 47.52	2.9594	−10 52 13.1	17.992	Cin. 1910
73	8.5	45 39.43	2.8046	−24 16 03.7	17.950	Cor. G. C. 1793
74	7.5	46 25.25	3.0234	− 4 42 48.0	17.920	A G_2 I 425
75	8.5	46 34.76	2.9215	−14 09 08.8	17.923	W. Z., Cin. 1910
76	8	1 47 19.36	+2.9639	−10 13 27.5	+17.894	Cin. 1910
77	9	48 30.17	2.9725	− 9 19 58.0	17.847	Equa. 9
78	9	49 45.82	2.9145	14 24 21.1	17.796	W. Z., Cin. 1910
79	9	51 37.75	2.6456	30 18 52.1	17.720	Equa. 10
80	9	52 37.48	3.0096	5 42 55.7	17.679	A G_2 I 450, A G_2 II 404
81	8	1 53 04.78	+3.0107	− 4 47 23.7	+17.660	A G_2 I 454
82	9	53 07.65	3.0002	− 6 31 25.0	17.658	Cin_1 262, A G_2 II 406
83	6.5	53 51.35	2.9307	−11 47 04.1	17.628	Cor. G. C. 1939, R_3 448
84	9	54 54.89	2.9638	9 37 27.2	17.584	A G_2 II 418
85	8.5	54 56.39	2.9881	− 7 30 06.3	17.583	Cin_1 266, A G_2 II 420
86	9	1 58 10.04	2.9517	−10 24 05.2	+17.475	Equa. 11
87	9	2 03 01.54	2.9481	−10 19 54.5	17.232	Cin. 1910
88	7	03 24.61	2.9454	−10 30 59.3	17.214	Cor. G. C. 2129, R_3 487
89	9.5	04 17.24	2.9717	− 8 19 59.4	17.175	A G_2 II 460
90	8.5	04 37.61	2.9463	−10 20 33.3	17.160	Cin. 1910

No.	Mag.	R.A. 1900	log p	Dec. 1900	log Δ	Remarks
		h m s	s			
96		2 06 16.41		— 2 02 36.5		A G$_2$ I 517
97		08 58.09		— 9 31 58.7		
98	8.5	09 07.62		1 12 04.1	16.052	
99		12 10.78	2.9215	—11 42 58.3		
100	8.5	13 25.52		— 7 04 00.4		A G$_1$ XV
101		2 14 08.26		— 7 18 29.6		
102	8	15 29.36		21 17 13.1		
103	9.5	16 53.10	2.9016	— 6 09 21.3		
104	9.5	17 52.95	2.7714	—21 42 49.1	16.541	Wien.
105	10	20 16.30	2.7064	—25 29 49.9	16.410	
106	8.5	2 20 35.20		—21 05 03.2		
107	8.5	21 16.77		— 1 28 25.1	19.431	
108	10	22 52.19		— 4 37 19.7	16.580	
109	9	23 43.79		11 04 17.8	19.207	
110	8.5	25 45.41		— 3 38 40.6	16.533	
111	9	2 26 40.63		17 25 35.4		
112	8	27 03.11		— 1 38 13.5	16.084	A G$_1$ XV 513
113	8	32 17.82	2.9030	11 37 57.4		
114	9	32 38.47		— 7 04 07.4		
115	8.5	33 20.19	3.0461	— 1 50 28.8		A G$_1$ XV 539
116	9	2 33 35.94		— 1 40 35.3		A G$_1$ XV 540
117	9	34 25.12		— 8 40 50.1	15.670	Cin$_1$ 326, A G$_2$ II 591
118	9.5	35 07.99	2.9831	— 6 06 32.9		A G$_2$ II 594
119	9	39 07.17	2.8404	—15 11 23.7		Bord. 580, W. Z.
120	8	39 28.66		—29 13 51.5		Cor. G. C. 2001
121	8.5	2 39 49.43		— 0 25 33.2		A G$_1$ XV 568
122	8.5	40 29.26	2.8281	15 50 59.5		
123	9	41 14.08		— 0 48 53.4		A G$_1$ XV
124	8	41 39.67	2.5530	30 54 00.2	15.267	Cor. G. C. 2045
125	10	42 02.15	2.9498	— 8 03 19.6	15.246	
126	9	2 42 19.88		— 0 37 36.2	+15.220	A G$_1$ XV 576
127	9	45 11.18		— 2 22 30.2	15.065	A G$_2$ I 682
128	9	48 03.48		1 40 04.1	14.898	A G$_1$ XV 600
129	9	48 07.03		—17 01 44.3		R$_3$ 685, Bord. 610, W. Z.
130	9.5	48 23.60	2.9061	—10 31 56.3		
131	10	2 49 13.96		—10 22 15.6		
132	9	49 40.14	3.0655	— 0 27 22.4	14.804	R$_3$ 691, A G$_1$ XV 608
133	8.5	52 04.73	2.8991	—10 46 39.3	14.661	
134	9	54 28.21	2.8603	—12 58 05.1	14.517	
135	9	57 01.70	2.8188	—15 13 15.8		
136	9	2 57 57.10		23 12 06.8		
137	9.5	59 57.66	2.6032	—26 24 29.6	14.181	
138	9	3 00 01.66	2.8045	—15 50 20.8	14.177	
139	8.5	00 03.14	2.8616	—12 33 32.7	14.130	
140	8	02 22.47	2.6074	— 26 10 04.3	14.147	Cor. G. C. 3325
141	9.5	3 03 05.79		— 1 11 40.9		Equa. 21
142	8.5	03 36.68	2.9047	— 9 55 42.4	14.084	A G$_2$ II 714
143	8.5	04 26.09	3.0118	3 36 57.0	13.881	A G$_2$ I 753
144	9	05 46.05	2.7020	26 56 05.7	13.816	Cin. 1910
145	9	06 22.97	2.9043	— 9 15 01.8	13.770	A G$_1$ II 730

No.	Mag.	R. A. 1900	Prec.	Decl. 1900	Prec.	Authority.
		H. M. S.	s	′ ″	′	
[illegible]	10	3 06 41.38	+2.8815	−11 07 30.4	−13.750	Equa. 22, 23
[illegible]	[illegible]	07 02.46	2.8867	−10 48 53.2	13.737	Cin. 1910
[illegible]	8.5	07 51.98	2.9785	− 5 30 24.7	13.084	A G$_2$ I 772
[illegible]	9.5	11 42.25	2.9386	− 7 41 47.0	13.437	A G$_2$ II 758
[illegible]	9	13 36.44	2.7200	−19 25 57.2	13.313	Cin. 1910
146	8.5	3 14 00.29	+2.9832	− 5 06 40.3	−13.287	A G$_2$ I 794
[illegible]	7	16 27.60	2.5654	−26 39 11.1	13.125	Cor. G. C. 3632, Cape 80 1388
148	7.5	17 19.77	2.7854	−15 49 02.9	13.068	Cin$_1$ 394, W. Z.
[illegible]	9	17 21.45	2.7085	-19 45 17.7	13.066	Cin$_2$ 224
[illegible]	9	17 22.13	3.0144	− 3 17 33.7	13.095	A G$_2$ I 808
151	8.5	3 18 52.15	+3.0226	− 2 48 53.0	+12.965	A G$_2$ I 811
152	9.5	18 57.40	2.9597	− 6 19 13.6	12.959	A G$_2$ II 789
153	9.5	19 02.35	2.6626	−21 53 43.0	12.954	Equa. 24
154	8.5	19 54.70	3.0248	− 2 40 47.3	12.895	A G$_2$ I 816
155	9	21 00.32	2.7377	−18 03 01.9	12.822	Cin. 1910
156	9	3 23 06.73	+2.9108	− 8 53 08.5	+12.679	A G$_2$ II 809
157	9	23 20.31	2.6593	−21 44 43.2	12.664	Equa. 25
158	9.5	23 25.90	2.4355	−31 34 06.9	12.658	Cor. Z. 3^h, 657
159	9	23 40.57	2.4094	−32 35 16.1	12.641	Cor. Z. 3^h, 663
160	9	24 28.08	2.9652	− 5 53 57.6	12.587	A G$_2$ I 842, A G$_2$ II 814
161	9.5	3 24 43.44	+2.4362	−31 25 46.4	−12.570	Cor. Z. 3^h, 697
162	8.5	27 18.86	2.6973	−19 39 21.9	12.393	Cin. 1910
163	9	28 32.32	2.6650	−21 07 11.1	12.308	Pomérantzef, Taschkent
164	9	28 42.60	2.8105	−13 56 47.6	12.297	Cin. 1910
165	7.5	29 07.38	2.7802	−15 27 37.3	12.267	R$_3$ 834, W. Z.
166	9	3 29 14.94	+2.9728	− 5 23 38.0	+12.259	A G$_2$ I 860
167	9	29 30.70	2.6724	−20 42 21.2	12.241	Cin. 1910
168	8.5	31 00.48	2.5713	−25 13 44.8	12.137	Cin$_1$ 416, Cin. 1910
169	7	31 17.12	2.2912	−36 16 14.1	12.118	Cor. G. C. 3950, Cape 80 1486
170	8.5	31 40.79	2.5788	−24 50 50.1	12.090	Cor. G. C. 3959
171	7.5	3 31 41.86	+2.7079	−18 52 45.7	+12.089	Cin. 1910
172	8.5	33 00.55	2.6567	−21 13 36.2	11.997	Cin$_2$ 242
173	9	33 58.90	2.7011	−19 04 25.6	11.929	Cin. 1910
174	9	34 07.79	2.6072	−23 24 49.3	11.918	Cin$_1$ 422
175	9.5	34 07.81	2.5321	−26 41 35.5	11.918	Equa. 26
176	7	3 34 51.68	+2.3031	−35 31 49.9	+11.867	Cor. G. C. 4027, Cape 80 1520
177	7	34 54.41	3.0455	− 1 26 45.7	11.864	A G$_1$ XV 787
178	8.5	35 09.86	2.2902	−35 57 36.9	11.845	Cor. Z. 3^h, 1028
179	9	35 59.61	2.6171	−22 50 33.1	11.787	Cin. 1910
180	9	36 06.98	2.6082	−23 14 18.0	11.778	Cin. 1910
181	7.5	3 37 45.36	+2.9790	− 4 55 28.9	+11.662	A G$_2$ I 917
182	7.5	38 14.89	2.6970	−19 01 49.6	11.626	Cin$_1$ 428
183	8	38 15.20	2.6260	−22 17 53.6	11.626	Cin. 1910
184	9	39 28.51	2.8058	−13 43 02.3	11.539	Cin. 1910
185	9	40 03.03	2.7041	18 36 22.0	11.499	Cin. 1910
186	[illegible]	3 40 32.39	+2.9023	4 11 23.3	+11.463	Equa. 27
187	[illegible]	40 50.43	2.6226	22 17 21.1	11.441	Equa. 28
188	[illegible]	40 56.12	2.9884	− 4 23 28.3	11.434	Equa. 29, 30
189	[illegible]	43 43.15	2.7413	−16 39 33.7	11.233	Equa. 31
190	8.5	50 10.95	[illegible]	20 45 18.7	10.761	Cin. 1910

No.	Mag.	R. A. 1900	Prec.	Decl. 1900	Prec.	Authority.
		h m s	s	° ′ ″	s	
190	8.5	3 50 23.25	+2.9223	—20 46 55.9	+ 6.340	Cin. 1910
191	9	55 22.97	2.8885	— 9 36 48.5	6.264	A G$_2$ II 1265
192	8.5	4 03 59.63	2.9547	—21 23 39.7	6.225	Cin. 1910
193	9	07 37.03	2.9288	—13 01 39.3	6.148	Cin. 1910
194	7.5	08 28.11	2.9360	—31 50 00.7	6.128	Cor. G. C. 4705
195	9	4 11 41.44	3.0054	0 58 45.3	+ 6.128	A G$_1$ XV 927
196	9	18 54.82	3.0522	— 0 58 25.9	6.091	A G$_1$ XV 960
197	8	21 39.84	2.9879	— 3 59 35.7	6.041	A G$_2$ I 1348
198	7.5	27 01.66	2.9740	—4 35 44.5	5.913	R. 4674, A G$_2$ I 1381
199	8	27 25.35	2.9830	— 5 15 04.9	7.881	Cin. 133, A G$_2$ I 1385
201	9	4 27 52.72	+2.9448	5 56 14.4	5.848	A G$_2$ I 1387, A G$_2$ II 1134
202	9	28 17.49	2.8821	— 8 48 02.1	7.811	A G$_2$ II 1138
203	8.5	31 19.27	2.9058	— 3 33 24.9	5.867	Berl. Jahrbuch
204	9	32 46.36	3.0063	— 3 03 42.4	5.840	A G$_2$ I 1319
205	9	33 38.18	3.0505	— 0 45 07.4	7.379	A G$_1$ XV 1037
206	8	4 34 09.28	+2.0038	— 5 00 19.2	5.837	A G$_2$ I 1225
207	9	35 02.99	3.0500	— 0 38 04.8	5.803	A G$_1$ XV 1044
208	8	35 54.37	3.0280	— 2 08 37.1	5.794	A G$_2$ I 1232
209	9.5	37 31.03	2.8786	8 48 51.9	7.062	A G$_2$ II 1101
210	9	38 16.43	2.9044	— 4 56 26.2	5.660	A G$_2$ I 1240
211	9.5	4 38 19.00	+3.0173	— 2 32 05.5	6.066	Equa. 32, 33
212	6.5	39 16.96	2.8800	— 8 41 24.8	6.017	R. 1135, Capo 85 320, A G$_2$ II 1267
213	9	41 27.40	3.0300	— 2 23 53.9	6.738	Cin. 1910
214	9	41 41.79	2.9672	— 4 47 15.5	6.710	A G$_2$ I 1270
215	9	43 12.73	2.9269	6 35 19.0	6.894	A G$_2$ II 1225
216	9	4 46 07.71	+2.9440	— 5 47 45.0	+ 6.352	A G$_2$ I 1290, A G$_2$ II 1247
217	8	47 22.25	2.9986	— 3 20 25.4	6.240	A G$_2$ I 1298
218	8	51 48.42	2.9623	— 4 56 18.8	5.878	Cin. 537, A G$_2$ I 1329
219	8.5	53 07.74	3.0509	— 0 42 36.7	5.768	A G$_1$ XV 1137
220	9	53 44.68	2.8977	—20 20 22.7	5.716	Cin. 1910
221	9	4 53 46.30	+3.0644	— 0 22 23.1	5.714	A G$_1$ XV 1164
222	8	54 28.49	2.8040	— 7 55 57.3	5.655	A G$_2$ II 1291
223	8	55 08.20	3.0651	— 0 20 36.1	5.591	A G$_1$ XV 1167
224	8.5	55 30.57	2.7057	—15 56 53.3	5.568	Bord. 1114, W. Z., Cin. 1910
225	9	5 00 45.87	2.2580	—32 13 30.3	5.125	Cor. / 4^h, 3981
226	8.5	5 01 28.05	+2.9032	3 31 07.3	+ 5.066	A G$_2$ I 1309
227	9	02 20.73	2.8612	— 9 16 34.9	4.991	A G$_2$ II 1347
228	9	02 29.79	2.9948	— 3 26 37.6	4.979	A G$_2$ I 1400
229	8.5	02 43.72	2.7972	—12 00 24.9	4.959	Cin. 1910
230	9	07 47.45	2.7056	—15 44 37.3	4.829	Bord. 1172, W. Z., Cin. 1910
231	9	5 08 38.42	+2.8252	—10 45 10.0	4.436	Cin. 1910
232	8.5	16 18.13	2.8005	11 42 54.7	3.800	Cin. 1910
233	9	16 53.00	2.8036	—11 34 41.4	3.750	Equa. 34
234	9	20 07.38	2.4757	—24 27 35.1	3.472	Cin. 1910
235	8.5	20 10.02	2.4648	—24 46 51.0	3.468	Cor. G. C. 6243, Cor. / 3^h, 603
236	8.5	5 22 43.84	+2.9494	— 5 20 24.1	3.240	A G$_2$ I 1369
237	8.5	23 41.78	2.9479	— 5 26 30.4	3.163	A G$_2$ I 1578
238	8.5	28 40.65	2.5423	—21 49 23.4	2.732	Cin. 1910
239	9	32 55.50	2.9151	— 6 46 05.7	2.363	A G$_2$ II 1577
240	8.5	32 59.31	2.9148	6 46 54.4	2.358	A G$_2$ II 1578

No.	Mag.	R. A. 1900.	Prec.	Decl. 1900.	Prec.	Authority
		h m s	s.	° ′ ″	″	
241	7.5	5 42 31.25	+2.6732	—16 41 00.0	— 1.598	W. Z., Cin. 1910
242	8.5	44 57.73	2.6492	—17 36 45.8	1.818	Cin. 1910
243	6	46 32.26	2.8959	— 7 32 41.4	— 1.477	Gr. 10y 993, R_2 1436, A G_2 II 1661
244	6.5	6 02 43.70	2.5380	—21 48 01.3	— 0.238	Cor. G. C. 7302, R_2 1512
245	9	04 38.73	2.9250	— 6 18 30.4	0.406	A G_2 II 1807
246	9	6 06 21.78	+2.5375	—21 49 28.4	— 0.557	Cin. 1910. μ'—0".68
247	9	11 06.06	2.5535	—21 14 41.5	0.071	Cin. 1910
248	9	12 15.06	2.4057	—26 32 53.6	1.071	Cin. 1910
249	9	13 56.21	2.6294	—18 22 32.5	1.210	Bord. 1527, Cin. 1910
250	8.5	15 13.08	2.3889	—27 08 22.7	1.331	Cor. G. C. 7647
251	8.5	6 21 21.23	+2.5112	22 52 17.0	— 1.866	Cin. 1910
252	9	37 54.10	2.2425	—32 11 34.7	3.301	Cin. 1910
253	8.5	38 20.93	2.5063	—23 15 09.7	3.340	Cor. G. C. 8289
254	7	40 52.45	2.3051	—27 14 53.9	3.559	Cor. G. C. 8355, Cape 80 3179
255	9	41 59.88	2.4140	—26 36 53.6	3.654	Cin. 1910
256	8.5	6 45 54.50	+2.6765	16 49 31.1	3.990	Bord. 1717, W. Z., Cin. 1910
257	9.5	54 34.34	2.8979	— 7 39 39.1	4.730	Equa. 35
258	9.5	55 18.60	2.8983	— 7 39 07.2	4.792	Cin_1 692, A G_2 II 2329
259	9	58 14.66	2.3703	—28 29 55.2	5.042	Cor. G. C. 8862
260	7.5	7 18 02.17	2.8632	— 9 26 17.5	6.607	A G_2 II 2618
261	9	7 19 12.07	+2.4192	27 27 12.0	— 6.803	Cin. 1910
262	10	20 21.25	2.4230	—27 21 39.7	6.887	Equa. 36
263	9	36 47.46	2.7553	14 35 11.4	8.220	W. Z., Cin. 1910
264	8.5	37 40.09	2.6778	—17 58 24.7	8.289	Bord. 2152, Cin_1 747, W. Z.
265	8.5	42 22.56	2.4565	—27 03 52.8	8.662	Cin. 1910
266	9	7 53 00.78	+2.7780	—14 03 03.0	— 9.502	W. Z., Cin. 1910
267	8	8 13 39.57	2.5511	—25 03 00.7	11.043	Cor. G. C. 11077
268	6.5	19 37.61	2.9885	— 4 23 30.8	11.475	A G_2 I 3215
269	9	19 51.81	2.9853	— 4 33 45.5	11.492	A G_2 I 3217
270	9	28 30.98	2.6231	—22 52 15.0	12.104	Cin_1 810
271	7	8 28 56.33	+2.7722	—15 46 06.2	—12.133	R 2198, Bord. 2576
272	8.5	29 24.94	3.0287	— 2 22 28.6	12.166	A G_2 I 3298
273	8.5	29 34.30	2.8294	—12 54 18.0	12.177	Cin. 1910
274	8.5	29 45.90	3.0020	— 3 48 36.0	12.192	A G_2 I 3303
275	9	30 07.86	3.0041	3 42 21.7	12.216	A G_2 I 3306
276	9	8 30 08.47	+3.0200	— 2 18 43.8	—12.217	A G_1 XV 2630, A G_2 I 3307
277	8.5	31 01.32	3.0476	— 1 21 45.4	12.278	A G_1 XV 2642
278	8.5	35 46.71	3.0024	— 3 52 03.3	12.604	A G_2 I 3351
279	9	40 56.85	2.4038	—33 14 23.6	12.953	Cor. Z. 8^h, 3292
280	9	41 42.38	2.7264	—18 47 25.9	13.003	Cin. 1910
281	8	8 45 13.07	+3.0313	— 2 21 48.4	—13.236	A G_2 I 3422
282	9	49 07.72	3.0365	— 2 05 50.8	13.491	A G_1 XV 2734, A G_2 I 3451
283	7	50 20.34	3.0252	— 2 45 54.7	13.560	R 2286, A G_2 I 3461
284	9	51 41.46	2.6207	—24 20 40.5	13.656	Cor. Z. 8^h, 4126, Cin. 1910
285	7	52 59.06	2.0066	— 4 28 19.2	13.738	R 2304, A G_2 I 3475
286	8	8 53 03.44	+3.0184	3 11 30.8	13.743	A G_2 I 3476
287	9	9 02 32.95	2.8177	15 15 40.2	14.330	W. Z., Cin. 1910
288	8.5	05 41.52	2.8345	—14 29 33.8	14.527	W. Z., Cin. 1910
289	9	08 07.56	2.6713	—23 46 28.8	14.673	Cin_1 855
290	8	11 08.56	2.8560	—23 04 38.4	14.851	Cor. G. C. 12601

		h. m. s				
		9 12 38.24		− 15 53 59.9	14.040	
		14 57.40		11 33 19.1		
		18 42.90		− 22 34 19.9		
		18 53.20		− 22 39 19.3		
295		19 32.55		− 6 27 21.9		
		9 23 17.24		−11 13 35.8	−15.433	
		26 18.38	2.8597	− 14 22 39.2		
		27 14.22		10 21 57.9	15.760	Bord. 2938, W. Z., Cin. 1910
		28 35.98		− 2 06 53.5		
		29 53.58		−15 55 51.4		Bord. 2952, W. Z., Cin. 1910
		9 31 02.34		−20 33 24.1		Cin. 1910
		32 23.55	2.9054	−11 46 04.4	16.035	
		36 34.49		−10 02 51.5		
		37 28.34		− 3 14 58.9	16.208	A G_2 I 3775
		38 36.80		− 9 00 18.4	16.350	
		9 38 51.30	+2.7030	−19 54 27.9		Cor. G. C. 13254, R_2 2501
		38 56.26		− 9 31 58.6		
		39 06.74		−20 41 51.9		Cin. 1910
		41 39.52		−14 04 20.9	16.508	
		43 23.12		17 54 39.4		Bord. 3017, W. Z., Cin. 1910
		9 44 04.94		−18 50 50.4		
		44 37.92	2.9804	− 6 23 01.3	16.655	
		44 54.05		− 4 38 34.6		
		45 27.62	2.9020	− 6 13 06.9		
		47 34.62	2.6073	−32 30 38.0		Cor. G. C. 13450, Cape 80 5339
		9 48 29.86		−26 51 53.3		Cor. G. C. 13464, Cape 80 5350
7	7	49 35.30	2.6973	−27 31 36.4		Cor. G. C. 13490, Cape 80 5360
	6	49 40.76		−25 27 44.0		
	8.5	51 01.17	2.8242	−19 12 11.6	16.960	Cin. 1910
		52 54.30	2.7235	−26 22 52.6	17.047	Cor. Z. 9h, 4001
	9	9 53 31.20	+2.6462	−31 19 00.8		Cor. Z. 9h, 4042
		54 24.36	2.7240	−26 35 25.1		Cor. Z. 9h, 4107
	9.5	54 34.20	2.6495	−31 18 54.8		Cor. Z. 9h, 4117
	8.5	56 37.03	2.8341	−19 11 35.4	17.217	
		58 13.73		− 6 09 20.7	17.288	A G_2 I 3904, A G_2 II 3883
	9	9 58 57.64	+2.9879	− 7 10 40.7	−17.320	
		10 02 25.12	2.9894	− 7 14 13.9		
	4	05 42.76	2.9384	−11 51 35.0		Ber. Jahrbuch
		13 46.38	2.7812	−25 59 52.9	17.937	Cor. G. C. 14049
		16 19.06	2.8886	−17 28 50.0	18.035	
	9	10 18 31.79		−33 38 03.2	−18.119	Cor. Z. 10h, 1282
		19 11.02	2.6921	−33 45 50.0	18.143	Cor. Z. 10h, 1330
333		20 58.22	2.8874	−17 55 38.8	18.209	Bord. 3192, W. Z.
		26 59.05	2.7084	−34 36 43.7	18.424	Cor. G. C. 14355, Cape 80 5759
		29 09.99		−26 49 59.5	18.498	Cor. G. C. 14461, Cape 80 5783
		10 30 21.64	+3.0215	5 44 27.4	−18.538	A G_2 I 4171
337		32 00.78	2.8160	−27 08 17.5		Cor. G. C. 14479, Lick Pi.
	5.5	32 32.10	2.8201	−26 53 39.8	18.610	R_2 2755, Lick Pi.
	8	43 05.71		− 9 26 49.8	18.934	A G_2 II 4095
		43 48.64	2.8726	−24 37 57.5		Cin. 1910

No.	Mag.	R. A. 1900.	Prec.	Decl 1900.	Prec.	Authority.
		H. M. S.	S.	° ′ ″	″	
341	8.5	10 46 23.21	+2.9808	—12 17 22.6	—19.026	Cin. 1910
342	9	57 38.50	2.9235	—22 33 03.3	19.315	Cin. 1910
343	8.5	59 47.53	2.9730	—15 42 36.0	19.364	Bord. 3352, W. Z., Cin. 1910
344	8.5	11 03 55.71	3.0172	— 9 43 46.6	19.455	A G_2 II 4198
345	7	04 00.36	2.9621	—18 52 28.2	19.457	R_3 2887, Bord. 3365
346	8.5	11 06 31.57	+2.8409	—36 52 05.0	—19.500	Cin. 1910
347	6.5	07 05.38	2.9218	—26 15 47.8	19.521	Cor. G. C. 15324, Cape 80 6209
348	6.5	07 32.65	2.9744	—17 57 19.4	19.520	R_3 2900, W. Z.
349	7	07 49.36	3.0009	—13 23 17.1	19.534	Cor. G. C. 15342, R_3 2902
350	9	09 52.30	2.9489	—23 06 10.1	19.575	Cin. 1910 μ +0s.023
351	8.5	11 11 05.38	+2.8946	—32 09 16.5	—19.597	Cin_1 1014
352	8.5	12 08.48	2.9400	—25 35 07.2	19.617	Cor. Z. 11h, 793, Cin. 1910
353	9	12 43.18	2.9412	—25 38 42.5	19.627	Cor. Z. 11h, 828, Cin. 1910
354	6	15 28.93	3.0284	— 9 44 49.9	19.675	R_3 2934, A G_2 II 4265
355	6.5	20 51.96	3.0194	—13 12 04.8	19.761	R_3 2956
356	7.5	11 21 13.14	+3.0357	— 9 19 45.4	—19.766	Cin_1 1029, A G_2 II 4289. μ—0s.002 μ'—0″.09
357	8	22 33.52	3.0243	—12 33 16.0	19.785	Cin. 1910
358	9	25 18.67	3.0228	—13 54 31.8	19.823	Cin. 1910
359	9.5	25 55.85	3.0345	—10 54 55.8	19.831	Cin. 1910
360	9	26 05.14	2.9602	—29 42 46.5	19.833	Cin. 1910
361	9.5	11 26 25.54	+3.0255	—13 35 56.0	—19.837	Equa. 40
362	9.5	27 15.60	3.0410	— 9 27.24.3	19.848	Equa. 41
363	8.5	27 28.86	2.9365	—35 46 14.7	19.851	Cor. Z. 11h, 1825
364	9	27 30.60	3.0269	—13 37 59.7	19.851	Cin. 1910 [μ'+0″.03
365	4.5	31 36.51	3.0458	— 9 14 56.8	19.898	Gr. II 10y 3132, A G_2 II 4329. μ—0s.005
366	9	11 34 09.35	+2.9585	—37 11 59.2	—19.925	Cor. Z. 11h, 2317
367	7.5	34 34.49	3.0495	— 8 54 42.5	19.929	A G_2 II 4340
368	8.5	36 46.04	3.0507	— 5 29 11.2	19.949	A G_2 I 4388
369	8.5	37 42.30	3.0504	— 5 51 40.8	19.957	A G_2 I 4394
370	9	38 10.04	3.0452	—12 13 26.9	19.961	Cin. 1910. μ—0s.007
371	8	11 38 29.37	+3.0427	—13 27 47.8	—19.964	Cin. 1910
372	9	38 44.54	3.0367	—16 12 20.3	19.966	W. Z., Cin. 1910
373	9	39 38.43	3.0548	— 8 36 05.2	19.973	A G_2 II 4369
374	7	41 19.51	3.0163	—27 24 29.4	19.986	Cor. G. C. 16091
375	8.5	41 53.72	3.0533	—10 23 36.0	19.990	Cin_1 1059
376	9.5	11 43 44.70	+3.0551	—10 28 28.0	—20.001	Cin_1 1061
377	9	43 59.28	3.0454	—16 18 45.8	20.003	Bord. 3529, W. Z.
378	8.5	45 15.05	3.0258	—28 34 19.5	20.010	Cor. Z. 11h, 3038, Cin. 1910
379	7.1	46 04.38	3.0622	— 7 26 05.3	20.015	R_3 3076, A G_2 II 4401
380	9.5	47 18.88	3.0328	—28 20 11.7	20.021	Cor. Z. 11h, 3169
381	8	11 48 20.54	+3.0688	— 3 19 38.6	—20.026	A G_2 I 4436
382	9	49 03.84	3.0463	—22 32 32.0	20.029	Cin. 1910
383	9	51 34.44	3.0708	— 2 13 15.5	20.039	A G_1 XV 3328, A G_2 I 4453
384	8.5	52 01.63	3.0578	—17 49 34.7	20.040	Bord. 3567, W. Z., Cin. 1910
385	8.5	52 53.32	3.0627	—13 33 17.9	20.043	Cin_1 1073
386	9	11 53 00.18	+3.0589	—18 38 26.6	—20.043	Cin. 1910
387	9	53 39.56	3.0613	—17 12 10.3	20.045	Bord. 3574, W. Z., Cin. 1910
388	8	54 27.08	3.0719	— 1 21 39.7	20.046	A G_1 XV 3330
389	9	54 59.66	3.0635	—17 26 38.6	20.047	Bord. 3576, W. Z., Cin. 1910
390	9	55 17.31	3.0726	— 0 08 06.2	20.047	A G_1 XV 3331

		H. M. S.				
	8.5	11 58 34.59		+18 14 07.3		W. Z., Cin. 1910
	8	59 39.72		+ 1 45 19.5		A G. XV 3[illegible]
	9	12 00 17.48		—26 07 30.0		Cor. Z. 11[h], 4025
	9	00 27.29		—29 27 30.7	20.052	W. Z., Cin. 1910
	9	04 38.62	3.0707	— 8 15 51.4		A G. XV [illegible]
	8	12 11 28.27		+ 9 29 51.4	—20.027	A G. II 4[illegible]
	9	14 19.94		—11 48 17.5		[illegible] 1910
	9	16 21.97	3.0001	—11 43 40.0		Cin. 1910
399	8.5	16 23.35		— 2 56 41.6		A G. I 4[illegible]
400	9	16 39.62		18 01 51.4	19.978	W. Z., Cin. 1910
	9	12 21 39.81		— 7 10 18.0		A G. II 4[illegible]
	8.5	21 49.80	3.0850	— 5 30 30.1		A G. I 4[illegible]
	9	22 51.12		—22 40 35.2		Cin. 1910
	9	22 54.13		22 38 22.5		[illegible]
	9	23 28.68		— 7 43 39.9	19.947	A G. II 4[illegible]
406	8.5	12 25 11.55		+ 1 23 21.1		A G. XV [illegible]
	9	27 17.35		— 7 36 19.7		A G. II 4[illegible]
	8	29 04.77		— 3 10 05.1		Cin. 1120, A G. I 4625
	9	33 33.00		— 4 46 29.7		A G. I [illegible]
	9	34 28.90		—26 21 44.7		Cin. 1910
	9	12 34 56.07	+3.0959	— 6 30 41.5	—19.820	A G. II 4613
	9	35 54.30		—11 02 08.1		[illegible]
	8	36 50.49		— 4 40 16.9	19.79[illegible]	A G. I 4656
	9	37 58.73		+ 0 00 33.5		A G. XV [illegible]
	8.5	39 16.30	3.1110	— 9 32 01.2		A G. II [illegible]
	9	12 39 32.15	+3.0814	— 2 09 37.6		Cin. 1132, A G. I 4667
	9	39 58.31		— 6 24 25.2	19.748	A G. I [illegible] A G. II 4[illegible]
	8.5	40 18.05	3.1061	— 8 08 11.5		Cin. 1134, A G. II 4634
	8.5	41 32.70		— 0 06 59.0	19.724	A G. XV [illegible]
	10	42 32.76	3.0844	— 2 43 05.8	19.707	[illegible]
	9	12 43 22.95		—13 52 14.3	—19.694	Cin. 1910
	7.5	43 48.97		— 8 40 26.1	19.687	A G. II 4644
	9	43 50.13	3.0770	— 0 57 30.8	19.687	A G. XV 3467
	9	44 04.97	3.0963	— 5 16 41.1	19.682	A G. I 4684
	9	45 30.78	3.1000	— 5 54 56.7	19.658	A G. I 4688
426	9	12 45 55.35		—10 43 22.5		Cin. 1910
	9	46 10.66		— 9 47 37.8	19.646	R. [illegible] A G. II 4653
	8	46 12.37		—14 47 38.0	19.646	W. Z., Cin. 1910
	7.5	46 13.11		—12 56 17.5	19.646	Cin. 1146, Cin. 1910. μ—0[s].020 μ'—0".35
	8	46 52.51		— 7 58 46.1		A G. II 4637
	9	12 47 04.54		— 0 23 05.4	—19.631	A G. XV 3476
	9	47 46.90	3.1046	— 6 34 56.4	19.618	A G. II 4661
	9	47 52.57		— 8 41 03.5	19.616	A G. II 4662
434	8	48 29.53		9 04 32.1	19.605	A G. II 4667
435	9	48 47.35		6 17 12.4	19.600	Equa. 43
	8.5	12 49 38.71		— 9 53 31.0		A G. II [illegible]
437	9	49 44.16		—12 09 57.9		Equa. 43
	8	50 35.89		13 04 17.1	19.566	Cin. 1910
439	9	51 11.51		— 7 57 15.6		A G. II 4681
	8	52 17.09		—19 12 34.4		Cin. 1910

No.	Mag.	R. A. 1900	Pre.	Dec. 1900	Prec.	Authority.
		H. M. S.	s	° ′ ″	″	
[illegible]	7	12 52 49.06	+3.1514	—14 26 39.7	-19.522	R_3 3373, W. Z.
442	8.5	54 35.65	3.0942	— 3 53 23.4	19.486	A G_2 I 4730
443	8	55 09.61	3.1483	—13 21 15.0	19.474	R_3 3385
[illegible]	[illegible]	55 35.46	3.1527	—13 59 18.9	19.465	Equa. 45
445	[illegible]	55 38.77	3.1525	—13 56 59.8	19.464	Equa. 46
446	8.5	12 57 48.21	+3.1033	— 5 13 47.4	-19.418	A G_2 I 4741
447	9	57 52.00	3.1160	- 7 23 17.1	19.416	A G_2 II 4705
448	9	58 21.22	3.1405	—12 50 29.6	19.406	Cin. 1910
449	8	58 22.86	3.1385	—11 02 34.6	19.405	R_3 3395, Romb$_2$ 2990. μ—0^s.006 μ' 0″.09
450	8.5	59 01.50	3.1093	— 6 07 30.6	19.391	A G_2 I 4753, A G_2 II 4707
451	8.5	13 00 09.31	+3.1101	— 7 36 46.6	19.365	A G_2 II 4710
452	9	00 27.88	3.1340	— 9 57 56.9	19.358	A G_2 II 4711
453	9	01 46.11	3.1105	— 7 30 10.1	19.328	A G_2 II 4722
454	9	03 14.15	3.1689	—14 47 33.1	19.294	W. Z., Cin. 1910
455	9	03 34.18	3.1145	— 6 31 16.3	19.286	A G_2 II 4726, Cin. 1910
456	8.5	13 04 23.89	+3.1199	7 14 52.5	—19.266	A G_2 II 4730
457	7.5	04 24.03	3.1789	—15 58 55.6	19.265	R_3 3420, W. Z.
458	4.5	04 46.24	3.1054	— 5 00 18.7	19.257	Ber. Jahrbuch
459	9	07 21.41	3.2054	—18 54 51.3	19.102	Bord. 3883, Cin. 1910
460	8	08 49.16	3.1803	—16 01 29.7	19.155	Bord. 3889, W. Z., Cin. 1910
461	10	13 10 07.71	+3.1851	—15 35 47.8	—19.121	Equa. 47
462	9	10 29.05	3.1868	—15 44′ 46.1	19.111	Bord. 3896, W. Z., Cin. 1910
463	8	12 46.73	3.2791	—26 18 52.7	19.050	Cor. G. C. 18102, Wanach. Strassbourg.
464	7	12 53.68	3.2931	—27 48 10.5	19.047	Cor. G. C. 18104, Cape 80 7294
465	7.5	13 42.49	3.1635	—12 07 17.4	19.024	Cor. G. C. 18125
466	9	13 14 30.01	+3.2284	—20 02 23.0	—19.002	Bord. 3912, Cin. 1910
467	8	14 58.37	3.3866	—36 11 05.5	18.989	Ber. Jahrbuch
468	8	15 00.01	3.2906	—26 53 03.0	18.988	Cor. G. C. 18152, Cin. 1910
469	9	15 29.68	3.2922	—26 54 48.6	18.974	Cor. Z. 13^h, 853
470	9	15 40.97	3.2416	—21 16 54.1	18.969	Cin. 1910
471	7	13 16 50.91	+3.1666	—12 03 19.9	—18.935	R_3 3470, Cape 00 1810
472	8	17 27.94	3.1724	—12 39 48.8	18.918	Cin. 1910
473	9	17 45.73	3.1526	—10 10 29.8	18.909	A G_2 II 4788
474	9	20 21.17	3.1700	—11 57 53.9	18.832	Cin. 1910
475	9	20 30.95	3.2453	—20 33 40.0	18.827	Cin. 1910
476	9.5	13 22 26.05	+3.3365	—29 16 21.1	—18.769	Cor. Z. 13^h, 1267
477	9	23 51.13	3.2236	—17 30 45.3	18.725	Cin. 1910
478	9.5	25 15.31	3.2249	—17 23 43.1	18.681	Equa. 48
479	9	25 31.19	3.1434	— 8 15 28.0	18.672	A G_2 II 4818
480	8	26 34.51	3.3897	—32 44 03.2	18.638	Cor. G. C. 18410, Cin. 1910
481	9.5	13 29 26.10	+3.0770	— 0 29 14.6	—18.545	Equa. 49, 50
482	9	30 44.72	3.1458	— 8 04 09.7	18.501	A G_2 II 4849
483	7	32 45.50	3.3685	—29 19 48.4	18.432	Cor. G. C. 18546, Cape 80 7472
484	9	33 00.91	3.2371	—17 17 46.1	18.423	Bord. 3993, W. Z., Cin. 1910
485	9	36 47.23	3.4023	—31 01 20.4	18.290	Cor. Z. 13^h, 2134
486	8.5	13 37 45.56	+3.4042	—30 56 25.3	—18.256	Cor. G. C. 18641, Cin$_1$ 1189. Cin. 1910
487	8.5	43 58.61	3.1427	— 6 48 56.3	18.024	A G_2 II 4925
488	8.5	47 44.19	3.1476	7 14 13.7	17.877	A G_2 II 4940
489	7	48 23.99	3.1434	— 5 41 35.2	17.851	A G_2 I 4966
490	6.5	48 36.88	3.2381	—28 04 31.7	17.843	Cape 80 7620, Lick Pi. μ 0^s.015 μ'—0″.06

	6	14 40 36.08		— 1 [illegible]		
		52 [illegible]		— 4 [illegible]		
		58 [illegible]		— 33 17 40.3		
		59 [illegible]		— [illegible]		
		[illegible]		— [illegible]		
	10	14 06 11.35		— 6 38 51.3		Equa. 51
		[illegible]		— 4 41 33.2		
		[illegible]		— 2 50 30.7		
		19 42.43		— 7 04 24.4	16.784	
		[illegible]		— 16 31 43.7	16.628	
		14 17 25.61		— 2 43 36.0	—16.553	
		24 [illegible]		— 5 32 13.3		
		[illegible]	3.0735	[illegible]		
		[illegible]		—26 17 27.5		Cor. G. C. 19848, Cape 80 7972
		35 06.95		— 25 59 57.6		Cor. G. C. 19877, Cape 80 7087
		14 [illegible]		[illegible]		Bord. 4254, W. Z., Cin. 1910
		36 49.79		[illegible]		Bord. 4256, W. Z., Cin. 1910.
		38 02.22		— 8 42 06.2		A G_2 II 5167
		38 52.48		11 11 34.7	15.424	Cin. 1910
		[illegible]		— 8 30 24.5	15.374	
		14 40 20.79		[illegible]		
		44 04.07		—18 31 34.0		Bord. 4286, Cin. 1910
		53 15.62		—16 02 53.6		Bord. 4334, W. Z., Cin. 1910
		53 17.59		—18 55 55.7	14.588	Bord. 4335
		53 47.49		[illegible]		A G_1 XV_1 3839
		14 54 03.84		—18 54 21.8		Bord. 4340, Cin. 1910
	9.5	54 58.08		—13 44 18.1	14.488	Equa. 52
	6.5	59 49.14		— 7 10 49.5		R_3 3885, A G_2 II 5263
	7.5	15 01 04.81		32 31 24.7	14.112	Cor. G. C. 20495
		03 15.80		—19 49 13.0		Equa. 53
		15 03 51.37		—18 00 59.6		Bord. 4386, W. Z., Cin. 1910
		04 32.05	3.2580	—10 52 55.4		Cin. 1910
	8	05 53.79	3.2628	—11 05 32.9	13.810	Cin. 1910
		08 46.69		—13 50 07.6	13.626	R_3 3961, [illegible]
	8.5	[illegible]		—11 04 32.1		[illegible]
	8.5	15 19 12.19		—14 19 16.1		W. Z., Cin. 1910
		10 56.66		—23 38 26.5	13.486	Cor. G. C. 20710
	8	14 38.64		—12 49 43.8		[illegible]
	9.5	16 52.99		— 2 13 28.6		Equa. 54, 55, 56
		17 06.47		— 6 56 53.0	13.082	
		15 24 36.79		— 2 28 51.3	—12.577	A G_2 I 5403
		32 00.47		—16 24 04.9	12.067	Bord. 4531, W. Z.
	9.5	32 29.64		—16 12 35.2	12.033	Equa. 57
		42 47.66		—13 26 32.7		Equa. 58, 59
	8	44 [illegible]		— 29 06 31.0		Cor. G. C. 21448
		16 06 23.96	+3.9223	[illegible]	— 9.537	
	8.5	11 16.95		—22 40 25.5		R_3 4218, Pomérantzef, Taschkent
	8.5	25 [illegible]	3.3535	—12 54 57.0	8.057	Romb$_2$ 3752, Cin. 1910
	8.5	44 13.44	3.0706	— 0 05 51.3		
		44 54.19		22 01 59.6		Pomérantzef, Taschkent, Cin. 1910

		R. A. 1900.	Prec.	Decl. 1900	Prec.	Authority.
		H M S	S.	° ′ ″	″	
[illegible]	[illegible]	16 52 14.32	+3.8100	—29 57 54.3	— 5.843	Cin. 1910
[illegible]	[illegible]	55 55.59	3.7045	—26 11 04.7	5.534	Cin_1 1382
[illegible]	[illegible]	57 07.06	3.8155	—29 59 38.4	5.434	Cin. 1910
544	9	57 39.60	3.6070	—22 31 59.1	5.388	Pomérantzef, Taschkent
545	9	57 46.73	3.6052	—24 42.12.2	5.378	Cin. 1910
[illegible]	[illegible]	16 58 24.29	+3.7048	—26 07 34.2	5.325	Cin. 1910
547	6.5	17 00 41.39	3.7136	—26 22 39.1	5.132	Cape 00 2336, Lick Pi.
548	8.5	04 40.06	3.7149	—26 19 32.0	4.704	Cor. G. C. 23246
549	8	05 24.10	3.7227	—26 34 40.0	4.732	Cor. G. C. 23263, Lick Pi.
550	9	05 36.27	3.8034	—29 20 55.2	4.715	Cape 00 2344
551	10	17 05 42.05	+4.0527	—37 01 16.3	4.707	Cor. Z. 17^h, 270
552	8	07 37.40	3.3640	—12 36 33.7	4.543	Guédéonof, Taschkent.
553	8.5	09 05.51	3.7618	—27 51 14.3	4.418	Cor. G. C. 23350, Lick Pi.
554	7	12 00.60	3.6539	—23 57 45.0	4.168	Cin_2 1514, Cape 00 2363. μ +0s.005 μ' —0″.08
555	8.5	14 23.89	3.5168	—18 43 14.7	3.964	Cin. 1910
556	6.5	17 14 41.99	+3.5299	—19 13 40.0	— 3.937	Cin_1 1405, $Romb_2$ 4002. μ —0s.010 μ' —0″.14
557	8.5	17 35.43	3.4965	—17 52 30.1	3.689	Bord. 4984, W. Z.
558	9	17 50.94	3.7174	—26 07 43.2	3.667	Cin. 1910
559	8.5	22 47.41	3.6425	23 21 29.1	3.241	Cor. G. C. 23671
560	8.5	32 11.23	3.1412	— 2 57 09.8	2.427	A G_2 I 5924
561	9	17 32 39.41	+3.6632	—23 58 59.2	— 2.386	Pomérantzef, Taschkent, Cin. 1910
562	8.5	43 02.97	4.0778	—37 00 40.7	1.482	Cape 85 1252, Cape 90 2168
563	7.5	43 39.68	3.5574	—19 58 25.3	1.428	R_3 4639, Cape 00 2425
564	9	44 46.41	3.9906	—34 31 50.5	1.331	Cor. Special Cat. 41
565	9	45 58.38	3.5692	—20 24 36.8	1.226	Cin. 1910
566	7.5	17 57 12.21	+3.8403	—29 51 44.4	0.245	Cor. G. C. 24536
567	8	57 41.10	3.2528	— 7 40 07.8	0.203	A G_2 II 6075
568	9	57 52.88	3.0834	— 0 27 23.0	0.186	A G_1 XV 4478
569	8	58 25.11	3.2905	— 9 15 16.0	0.138	A G_2 II 6078
570	7.5	59 02.88	3.7787	—27 50 19.8	— 0.083	Cor. G. C. 24585
571	8.5	18 01 17.24	+3.6994	—25 06 55.2	+ 0.112	Cin. 1910
572	8	02 10.05	3.7169	—25 43 39.0	0.190	Cor. G. C. 24662
573	8	03 50.73	3.8935	—31 33 00.0	0.336	Cor. G. C. 24712
574	7	07 06.50	3.9074	31 59 31.8	0.622	Cor. G. C. 24789
575	9	17 50.90	3.6892	—24 49 16.9	1.560	Cin. 1910
576	7.5	18 19 05.01	+3.8515	—30 18 25.4	+ 1.668	Cor. G. C. 25098
577	8	19 39.73	3.6419	—23 08 09.2	1.718	Cor. G. C. 25111
578	8	24 08.81	3.7102	—25 36 57.6	2.109	Cor. G. C. 25249
579	7	24 24.67	3.6457	—23 19 01.5	2.132	Cape 00 2530
580	8	24 39.08	3.9148	—32 21 20.6	2.153	Cor. G. C. 25265
581	6	18 27 24.12	+3.9376	—33 05 25.9	+ 2.301	Cape 80 10101, Lick Pi.
582	8	35 39.10	3.9128	—32 27 41.2	3.107	Cin_1 1467, Cin. 1910
583	9.5	47 05.75	3.8441	—30 30 55.5	4.092	Cor. Z. 18^h, 2533
584	8.5	47 53.39	3.2751	— 8 47 59.6	4.160	A G_2 II 6418
585	5	49 04.40	3.6018	—22 47 46.3	4.261	Cape 00 2601. μ +0s.005 μ' —0″.01
586	9	18 52 59.04	+4.0506	—36 55 18.9	+ 4.595	Cor. Z. 18^h, 2785
587	9.5	19 01 01.28	[illegible]	— 6 13 36.7	5.276	A G_2 II 6562
588	9	08 41.00	[illegible]	— 2 54 21.6	5.920	A G_2 I 6529
589	8.5	13 33.10	[illegible]	— 1 45 35.0	6.325	A G_1 XV 4837, A G_2 I 6577
590	9	36 32.75	[illegible]	10 19 31.5	8.260	Cin. 1910

No.	Mag.	R A 1900	P.	Dec. 1900	P.	Authority
		h m s	s	° ′ ″	″	
603	8	19 37 24.25	+3.1852	−14 28 04.4	[illegible]	W. Z., Cin. 1910
604	[illegible]	48 54.07	3.3385	12 37 17.9	9.774	Cin. 1910
605	[illegible]	58 35.04	[illegible]	— 9 28 37.8	[illegible]	A G$_2$ II 7691
606	[illegible]	58 58.09	[illegible]	—22 11 43.5	9.948	Cordoba Durchkont.
607	8.5	20 20 16.89	3.1854	—25 16 20.4	11.630	[illegible]
608	[illegible]	20 24 25.37	3.1332	— 3 13 06.0	11.800	Cin. 1910, A G$_2$ I 7906
609	[illegible]	30 31.46	3.1780	—32 33 16.0	12.041	Cin. 1910
610	8.5	33 49.20	3.1853	5 16 51.7	12.130	R. [illegible] A G$_2$ I 7930
611	[illegible]	39 49.02	3.1918	— 0 04 06.5	12.877	Cin. 1910
612	[illegible]	42 00.49	3.1854	— 8 48 57.4	13.005	A G$_2$ II 8145
613	[illegible]	20 48 16.72	3.1908	—12 56 47.4	13.439	Rossb. 1852, Cin. 1910
614	[illegible]	58 24.15	3.1854	—11 34 00.7	14.080	Cin. 1910
615	[illegible]	21 09 32.00	3.1854	— 1 14 47.6	14.785	A G$_2$ XV 340
616	[illegible]	22 04.41	3.1908	— 2 09 49.7	15.477	A G$_2$ I 7491
617	[illegible]	23 54.51	3.1908	— 2 00 02.6	15.578	A G$_2$ I 7502
618	[illegible]	21 27 40.83	3.1908	— 1 19 29.5	15.784	Bonn V I, Cin. 1910
619	[illegible]	28 02.18	3.1908	— 1 33 07.3	15.803	Equa. 60
620	8.5	34 15.67	3.1854	—23 39 03.9	16.132	Pemcamtzeff Laschkent
621	[illegible]	42 01.81	3.1857	—13 35 03.4	16.852	Cin. 1910
622	8.5	43 38.94	3.1856	— 4 03 24.6	16.607	A G$_2$ I 7603
623	8.5	21 54 57.37	3.3413	—21 17 55.1	17.146	Cin$_1$ 1787
624	7.5	55 41.77	3.2388	13 30 15.9	15.174	Cin. 1875, Cin. 1910. μ −0".003 μ' −0".11
625	6.5	56 43.30	3.3110	32 36 59.3	9.291	Cor. G. C. 30137, Cape 80 11582
626	8.5	58 53.50	3.3360	—20 53 46.7	17.317	Cin. 1910
627	[illegible]	22 00 24.26	3.3077	—19 25 03.2	17.383	Bord. 6534
628	[illegible]	22 02 59.31	3.4730	—17 01 56.5	+17.409	Cape 00 3068
629	6.5	07 19.49	3.3017	—26 49 15.4	17.678	Cor. G. C. 30359, Cape 80 11652
630	9	09 32.19	3.2068	—17 38 26.8	17.768	Bord. 6570, W. Z., Cin. 1910
631	8.5	11 56.79	3.3458	—24 12 36.3	17.864	Cor. G. C. 30434
632	[illegible]	14 06.34	3.3524	—25 08 27.7	17.949	Cin. 1910
633	8.5	22 15 20.64	3.1208	— 4 39 48.4	+17.997	A G$_2$ I 7774
634	[illegible]	15 42.15	3.2440	—16 15 11.0	18.011	Equa. 61, 62
635	[illegible]	17 07.37	3.3457	—25 11 50.3	18.066	Cin. 1910
636	[illegible]	18 23.67	3.1164	— 4 21 04.0	18.114	A G$_2$ I 7702
637	[illegible]	19 01.29	3.1177	— 4 30 39.6	18.137	A G$_2$ I 7706
638	[illegible]	22 21 04.42	3.1040	— 3 17 41.8	+18.213	A G$_2$ I 7801
639	[illegible]	23 44.66	3.3477	—25 04 30.0	18.309	Cor. Z. 22^h, 668
640	9	27 04.95	3.2100	—14 40 58.8	18.427	W. Z., Cin. 1910
641	[illegible]	28 24.04	3.1742	—11 02 08.6	18.472	Cin. 1910
642	[illegible]	28 31.46	3.1072	—13 28 40.7	18.476	Equa. 63
643	8	22 31 26.78	3.3545	—26 34 18.1	+18.574	Cor. G. C. 30822
644	[illegible]	32 34.66	3.1140	— 4 44 38.1	18.611	Cin$_2$ 1917, A G$_2$ I 7851 μ −0".006 μ' −0".11
645	[illegible]	37 42.72	3.1157	— 5 13 05.1	18.773	A G$_2$ I 7876
646	[illegible]	39 06.65	3.0798	— 0 53 04.3	18.816	Equa. 64
647	[illegible]	40 30.96	3.2631	—22 43 56.5	18.858	Cin. 1910
648	[illegible]	22 40 58.06	3.1062	—11 41 29.9	18.872	Cape 00 3155
649	8.5	41 29.15	3.2330	—20 25 50.7	18.887	Cin$_1$ 1864
650	[illegible]	43 30.09	3.1087	—12 21 23.0	18.945	Cin. 1910
651	[illegible]	44 05.04	3.2505	—22 54 59.3	18.962	Cin. 1910
652	[illegible]	44 52.16	3.1187	— 6 05 43.1	18.984	A G$_2$ II 8132

[illegible]	[illegible]	[illegible]	Prec.	Decl. 190[illegible]	Prec	Authority.
		H. M. S.	S.	° ′ ″	″	
[illegible]	[illegible]	22 45 03.08	+3.1186	— 6 07 57.2	+18.989	A G_2 II 8134
[illegible]	[illegible]	46 00.76	3.0874	— 1 58 40.0	19.010	A G_2 I 7908
[illegible]	9	46 06.38	3.0889	— 2 10 58.0	19.019	A G_2 I 7909
644	8.5	46 15.35	3.2300	—21 28 14.6	19.023	Cin_1 1873, Cin. 1910
[illegible]	8	50 09.82	3.1165	— 6 13 22.7	19.128	A G_2 II 8159
646	8.5	22 50 19.66	+3.1157	— 6 07 06.9	+19.133	A G_2 II 8160
647	10	52 16.33	3.0830	— 1 33 07.4	19.183	Equa. 65
648	9	54 17.62	3.1621	—13 17 43.4	19.233	Cin. 1910
[illegible]	9.5	57 21.05	3.1177	— 7 06 39.2	19.308	Cape 00 3204
[illegible]	9.5	23 01 33.80	3.3252	—36 49 41.3	19.404	Cor. G. C. 31393
[illegible]	9	23 06 33.75	+3.0847	— 2 13 06.6	+19.509	A G_2 I 7995
[illegible]	9	06 56.63	3.0871	— 2 41 27.9	19.517	A G_2 I 7997
[illegible]	8.5	07 04.19	3.0866	— 2 35 23.7	19.520	A G_2 I 7999
654	7.5	07 54.65	3.2394	—28 57 25.3	19.536	Cor. G. C. 31504
[illegible]	7	08 57.78	3.0891	— 3 10 44.1	19.557	A G_2 I 8004
656	8	23 09 09.51	+3.2357	—29 00 09.2	+19.561	Cor. G. C. 31519, Lick Pi.
657	8.5	12 44.19	3.0970	— 5 04 05.3	19.627	A G_2 I 8018
658	9	12 59.63	3.0730	— 0 03 06.8	19.632	A G_1 XV 5803
[illegible]	8	13 11.43	3.1107	— 7 58 59.3	19.635	A G_2 II 8278
660	9.5	15 24.16	3.1141	— 9 05 51.2	19.674	A G_2 II 8285
[illegible]	9.5	23 15 50.91	+3.1134	— 9 02 39.5	+19.681	Cin_1 1931, A G_2 II 8290
662	7	16 12.28	3.0959	— 5 13 11.4	19.687	A G_2 I 8036
663	7	23 50.30	3.1091	— 9 48 58.3	19.803	A G_2 II 8327
664	10	28 49.96	3.0834	— 3 23 14.0	19.867	Equa. 66
665	9	29 59.92	3.0738	— 0 21 42.8	19.881	A G_1 XV 5853
666	8	23 30 15.80	+3.1261	—17 08 08.5	+19.883	R_3 6299, W. Z.
667	8	31 36.44	3.0829	— 3 30 54.2	19.898	A G_2 I 8097
668	8.5	32 28.40	3.1115	—13 36 53.4	19.908	Cape 80 12219, R_3 6307
669	7	32 51.08	3.1170	—15 38 44.3	19.912	R_3 6309, Lick Pi, W. Z. μ +0^s.003 μ' —0″.10
670	9	34 06.27	3.1072	—12 51 50.4	19.924	Cin_1 1958
[illegible]	9	23 35 19.61	+3.1072	—13 30 09.1	+19.936	Cin. 1910
672	8.5	36 01.25	3.0900	— 7 01 54.0	19.942	A G_2 II 8370
673	9.5	37 59.41	3.0776	— 2 11 41.2	19.960	A G_2 I 8122
674	9	38 01.15	3.1017	—12 46 09.3	19.960	Cin. 1910. μ —0^s.010 μ' —0″.20
[illegible]	7.5	43 00.15	3.1034	17 15 12.5	19.907	R_3 6355, W. Z.
676	9	23 49 03.17	+3.0729	— 0 08 41.5	+20.027	A G_1 XV 5907
677	9	53 44.17	3.0758	— 4 50 40.0	20.045	A G_2 I 8185

Micrometrical Measures of Nebulae.

No	N. G. C.	Epoch	Comparison $\lambda -$	Comparison Δ		Mean Place and Difference α	Mean Place and Difference δ	Observations and Notes
			M. S.			H. M. S.		
1	[illegible]	1907.8	—[illegible]	+ 6 24.6	2	0 05 37.96	— 0 13 38.8	Pretty ft.
		08.8	45.15			—0 [illegible]	+6 23.5	
2	142	1900.9	[illegible]	— [illegible]	1	0 04 21.90	—12 35 29.8	Pretty ft. Sm. Stel.
		07.8	38.67	19.7		+1 38.74	— 4 [illegible]	Swift [illegible] small
3	40	1900.4	[illegible]	[illegible]	3	0 09 03.00	— 7 45 [illegible]	Very ft.
		08.8	21.47	46.5		[illegible]	+1 46.0	
4	50	1900.8	+0 35.30	— 8 50.2	3	0 09 [illegible]	— 7 45 [illegible]	Pretty br.
		07.8	35.25	48.9		+0 [illegible]	—8 4[illegible]	
5	62	1907.8	—[illegible]	—10 05.2	4	0 12 41.66	— 0 45 [illegible]	Very ft.
		08.8	13.47	04.3		—1 [illegible]	—10 04.8	
6	Virgin.	1907.8	—2 17.26	+ 2 12.6	5	0 16 06.46	— 3 52 0[illegible]	Ft.
		08.8	17.30	11.3		—2 17.26	+ 2 11.8	Salford's [illegible] too great, 3 1' too great.
7	113	1905.4	—1 33.87	+ 0 41.8	8	0 23 22.08	— 3 03 58.2	Very ft.
		09.0	33.80	38.3		—1 33.84	+ 0 39.9	
8	114	1905.[illegible]	—0 56.77	— 6 16.8	6	0 22 48.38	— 2 14 06.4	Very ft.
		07.8	56.67	16.2		—0 56.72	— 6 16.6	
9	118	1905.4 [illegible]	—0 38.77	— 3 51.8	6	0 22 48.38	— 2 14 06.4	Very ft.
		07.8	38.70	53.5		—0 38.73	— 3 52.7	
10	133	1907.0	+2 [illegible]	—14 [illegible]	7	0 22 58.19	— 33 33 33.0	Very br. lrg. elong.
		08.8	27.48	16.4		+2 27.27	—14 17.[illegible]	
11	145	1905.8	—0 20.47	+ 1 33.9	9	0 27 00.42	— 3 43 48.5	Ft. lrg. diffuse.
		07.8	[illegible]	35.0		—0 20.56	+ 1 34.4	
12	150	1907.8	+0 55.47	+17 [illegible]	11	0 28 03.31	—10 [illegible]	Pretty ft.
		08.8	55.47	16 56.0		+0 55.47	+16 [illegible]	
13	Nova 1901	1907.0	+1 31.17	+10 48.0	10	0 27 39.10	—28 32 03.7	Ft. lrg. diffuse [illegible] [round
		08.8	[illegible]	40.6		+1 [illegible]	+10 44.4	S. [illegible] has neb. p[illegible] p. ft. p. sm.
14	Nova 1901	1900.0	—2 [illegible]	— 2 28.5	14	0 29 [illegible]	32 17 [illegible]	60" sm. [illegible] which precedes [illegible]
		07.9	30.07	[illegible]		—0 30.03	— 2 28.4	Probably N. G. C. 148, the position of
15	155	1905.0	[illegible]	[illegible]	12	[illegible]	—11 16 49.5	Pretty ft.
		07.8	[illegible]	19.3		[illegible]	[illegible]	Swift's [illegible] too small
16	157	1905.0	—1 [illegible]	+ 3 15.0	15	0 31 17.82	[illegible]	Pretty br. lrg. diffuse.
						—1 36.00	[illegible]	
17		1907.8	[illegible]	— [illegible]	13	0 29 33.79	— 8 50 56.4	
		08.8	[illegible]	[illegible]		[illegible]	— 6 00.7	

No.	N. G. C. No.	Epoch.	Observed Δ α	Observed Δ δ	*	Star, Place, and Difference, 1900 α	Star, Place, and Difference, 1900 δ	Description and Notes.
			M. S.	′ ″		H. M. S.	′ ″	
[illegible]	[illegible]	1905.9	+0 40.90	— 0 25.2	15	0 30 15.46	—10 30 56.5	Very ft.
		07.9	41.24	26.1		+0 41.07	— 0 25.6	Swift's α 14ˢ too great.
[illegible]	175	1905.9	—0 20.33	— 1 22.7	18	0 32 42.44	—20 27 51.6	Ft.
		07.9	20.75	19.0		—0 20.54	— 1 21.3	
[illegible]	[illegible]	1905.9	+1 22.39	+ 4 11.1	17	0 32 33.93	— 9 37 25.1	Pretty br. A fainter neb. fol. s.
		07.8	22.42	14.1		+1 22.37	+ 4 12.5	
		08.8	22.27	12.0				
20	Nova	1907.8	+0 29.97	+ 3 39.3	19	0 33 30.98	—14 46 58.8	Very ft.
		08.8	30.02	37.1		+0 30.00	+ 3 38.2	
21	Nova	1907.9	—0 21.41	+ 4 30.6	20	0 34 50.04	—15 16 45.0	Very ft.
		08.8	21.36	27.7		—0 21.38	+ 4 29.1	
22	210	1905.9	+0 31.37	+ 0 41.1	21	0 35 02.16	—14 26 01.8	Very br.
		07.8	31.40	39.1		+0 31.38	+ 0 40.1	
23	217	1905.9	+0 40.52	— 3 44.2	22	0 35 50.54	—10 30 33.1	Ft.
		07.9	40.25	42.2		+0 40.38	— 3 43.2	
24	227	1907.9	+1 26.47	— 0 32.0	23	0 36 03.08	— 2 03 59.6	Ft. stellar nucleus.
		08.8	26.42	34.5		+1 26.44	— 0 33.1	
25	237	1907.9	+0 59.40	— 1 26.6	24	0 37 21.43	— 0 38 56.0	Very ft.
		08.8	59.88	26.2		+0 59.04	— 1 26.3	Swift's α 15ˢ too great.
26	230	1907.9	+1 36.52	+ 5 51.8	25	0 37 55.69	— 4 24 16.1	Very ft.
		08.8	36.25	51.8		+1 36.38	+5 52.0	
27	244	1907.9	+1 04.82	—12 38.5	26	0 39 42.05	—15 56 01.5	Ft.
		08.8	05.05	38.0		+1 04.95	—12 38.1	
28	245	1905.9	—1 48.74	— 7 11.0	31	0 42 47.78	— 2 08 58.8	Ft.
		06.9	48.57	16.2		—1 48.65	— 7 13.8	
29	253	1907.9	+0 14.07	+ 5 23.8	29	0 42 25.38	—25 55 30.0	Br. lrg.. elong.
		08.8	14.12	23.1		+0 14.10	+ 5 23.5	
29		1907.9	—0 00.65	+ 6 20.2	30	0 42 40.03	—25 56 28.6	
		08.8	00.00	12.0		—0 00.33	+6 16.1	
30	255	1907.9	+1 33.22	— 0 58.9	27	0 41 12.31	—11 59 52.8	Ft. diffuse.
		08.8	33.75	52.1		+1 33.49	— 0 55.3	
31	250	1907.9	+1 20.77	—14 58.8	28	0 41 37.36	— 3 04 20.1	Ft.
		08.8	20.52	55.8		+1 20.66	—14 57.1	
31		1907.9	—1 34.00	+15 08.9	32	0 44 31.52	— 3 34 28.9	
						—1 34.01	+15 08.7	
32	Nova	1905.9	+0 10.98	+ 2 16.3	31	0 42 47.78	— 2 08 58.8	Very ft.
		06.9	10.70	14.2		+0 10.85	+ 2 16.2	
		07.9	10.90	(03.3)				
		08.8	10.82	18.0				
33	268	1907.9	—0 13.22	— 4 07.4	33	0 45 18.27	— 5 40 10.2	Very ft. diffuse.
		08.8	13.15	05.7		—0 13.18	— 4 06.5	
34	270	1907.9	—1 04.78	— 9 [illegible]	35	0 46 34.25	— 9 21 45.6	Pretty ft. sm.
		08.8	04.17	[illegible]		—1 04.48	+ 0 59.4	

No.	N.G.C. No.	Epoch						Remarks
			M. S.			H. M. S.		
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	36	0 45 41.05	[illegible] 52.8	Pretty ft. sm.
		08.8				—0 05.43	+ 0 34.7	
35	[illegible]	[illegible]	[illegible]	[illegible]	37	0 46 [illegible]	[illegible] 08.4	[illegible]
			52.80	04.4			+ 4 03.7	
34	[illegible]	[illegible]	[illegible]	[illegible]	38	0 46 56.04	[illegible]	[illegible]
		08.8	06.38			+0 06.78	— 0 57.6	
33	[illegible]	[illegible]	[illegible]	[illegible]	39	0 47 04.42	[illegible]	Pretty br. for class
						[illegible]	[illegible]	
48		[illegible]	[illegible]	[illegible]	29	0 46 48.06	[illegible] 47.3	
						—1 07.44	—3 10.7	
30	[illegible]	[illegible]	[illegible]	+ 0 45.0	40	0 50 [illegible]	[illegible]	Very ft.
		09.8		4.1		—0 39.80	+0 46.1	
27	[illegible]	[illegible]	+0 27.20	— 6 34.3	28	0 51 13.85	—10 20 56.4	Very ft. b.s. diffuse
		08.8		27.0		+0 [illegible]	—9 31.1	Forms [illegible]
44	347	[illegible]	[illegible]	+ 0 10.2	44	0 53 08.85	— 8 07 10.8	Pretty ft. p.s.
						—0 21.17	—0 10.[illegible]	
47		1907.0	[illegible]	[illegible]	45	0 53 43.44	— 8 17 24.7	
						+1 04.25	—10 [illegible]	
42	341	1906.0	—0 23.38	— 3 18.3	46	0 56 06.76	— 9 40 31.4	Ft. prem. [illegible]
		08.9	22.87	06.4		—0 24.12	—3 05.9	
32		1907.0	[illegible]	[illegible]	45	0 55 48.48	— 9 54 46.8	
						—0 04.28	+11 18.3	
43	349	1907.0	+0 16.90	— 0 02.9	47	0 56 30.07	— [illegible] 16.7	Ft.
		08.9	16.73	04.6		+0 16.82	—0 03.8	
44	351	[illegible]	—0 27.45	+ 7 16.7	49	0 57 [illegible]	— 2 35 44.1	Ft.
		[illegible]	27.00	19.7		—0 27.22	+7 18.1	Small [illegible] too great
45	353	[illegible]	+2 29.08	+ 4 24.9	43	0 54 37.46	— 4 31 30.7	Ft.
		07.9	27.82	30.9		+2 27.18	+4 28.2	
46	350	[illegible]	[illegible]	[illegible]	47	0 56 30.97	— 7 20 19.7	Very ft.
		08.9	33.75	13.7		[illegible]	[illegible]	
47	357	1907.9	[illegible]	[illegible]	48	0 56 37.80	— 6 30 57.0	Ft. sm.
		08.9	41.04	40.8		+1 41.02	[illegible]	
40	[illegible]	[illegible]	[illegible]	[illegible]	50	1 01 18.43	— 1 17 00.5	Very ft.
		08.9	44.75	22.4		—1 44.61	—3 20.5	
49	340	1907.8	+0 57.30	[illegible]	51	1 06 [illegible]	0 58 38.1	Ft.
		[illegible]	[illegible]	[illegible]		+0 57.35	+9 [illegible]	
50	[illegible]	[illegible]	[illegible]	+ 6 04.4	51	1 06 44.38	0 58 38.1	Very ft.
		[illegible]	[illegible]	03.1		+1 06.21	[illegible]	
51	[illegible]	[illegible]	[illegible]	[illegible]	51	1 06 44.38	— 0 58 38.1	Ft.
		[illegible]	[illegible]	41.5		+1 08.76	+11 39.6	
52	439	[illegible]	+0 21.28	+ 9 42.3	52	1 08 40.45	32 26 16.4	Pretty br. lrg.
		[illegible]	[illegible]	44.0		+0 25.04	+9 43.2	

	N. G. C.	Epoch.	Δα	Δδ	*	α	δ	Description and Notes.
			M. S.			H. M. S.		
53	442	1907.3	—0 [illegible]18	— 2 29.0	53	1 09 12.75	— 1 30 32.8	Pretty ft.
		08.9	10.17	28.6		—0 10.22	—2 27.2	Swift's α 11[s] too small.
54	448	1906.0	—1 21.51	+ 0 09.8	54	1 11 31.08	2 [illegible] 29.9	Pretty br.
		06.9	21.41	07.4		—1 21.40	+0 08.4	Swift's α 6[s] too great.
55	447	1906.0	+2 22.82	3 03.0	55	1 14 54.83	— 1 20 54.1	Very ft.
		06.9	2[illegible]	00.0		—2 22.91	—3 01.1	
56	541	1906.0	—1 43.04	—11 11.1	56	1 22 21.90	— 1 42 54.8	Ft. sm.
		06.9	43.57	08.2		—1 43.47	—11 09.9	
		07.9	43.25	09.4				
57	547	1906.0	—1 27.59	— 8 00.7	56	1 22 21.96	1 42 54.8	Ft. Double neb. fol. observed.
		06.9	27.45	8 56.1		—1 27.67	—8 58.0	
		07.9	28.00	56.5				
58	560	1907.9	—0 35.70	+ 7 18.0	57	1 22 55.00	— 2 33 11.7	Very ft.
		08.9	35.65	11.7		—0 35.68	—7 14.7	
59	562	1907.9	—0 13.00	+ 9 [illegible]6.9	57	1 22 55.00	2 33 11.7	Very ft.
		08.9	12.70	18.8		—0 12.86	+9 19.2	
60	570	1907.9	—0 18.55	— 6 17.4	58	1 23 33.73	1 34 [illegible]5.8	Very ft.
		08.9	18.60	[illegible]		—0 18.57	+6 18.3	
61	577	1907.9	+0 02.55	—11 54.5	61	1 25 32.52	— 2 38 45.2	Ft.
		08.9	02.92	[illegible]		+0 02.75	—11 56.8	
62	578	1907.8	—0 30.20	— 8 35.4	60	1 25 32.47	—23 02 [illegible]6.3	Pretty br. lrg. diffuse.
		08.9	30.02	42.6		+0 30.08	—8 38.9	
63	581	1908.0	+2 14.86	— 1 07.2	59	1 24 05.01	— 7 21 56.2	Br.
						+2 14.87	—1 06.8	
64		1907.8	—0 10.45	— 0 57.2	63	1 26 [illegible]0.70	— 7 32 52.7	
		08.8	10.22	54.7		+0 10.33	+9 56.0	
65	585	1907.9	+0 41.48	+ 0 24.0	62	1 25 54.38	— 1 27 17.5	Very ft.
		08.9	41.58	[illegible]		+0 41.49	+0 27.1	
66	590	1908.0	—0 49.84	—11 31.3	64	1 28 [illegible]0.87	— 7 32 [illegible]1.1	Pretty br.
		07.8	49.75	34.1		—0 49.74	—9 33.5	
67	613	1907.9	—0 05.25	— 1 [illegible]0.1	66	1 29 46.23	—23 53 33.0	Br. pretty lrg.
		08.9	06.08	1 38.8		—0 05.06	—2 00.9	
68	615	1908.0	+0 20.14	— [illegible]0.1	65	1 29 45.51	— 7 33 14.7	Pretty br.
		07.8	20.27	[illegible]		+0 20.20	+2 04.5	
69	636	1908.9	—0 54.95	— 1 [illegible]0.8	67	1 35 01.78	— 7 37 22.0	Br. sm.
		09.9	55.00	56.9		—0 54.98	—3 55.4	
70	685	1908.0	+0 43.56	— 1 08.0	68	1 43 39.13	—15 27 16.3	Very ft.
		07.8	43.57	09.0		+0 43.57	—1 08.4	
71	681	1908.0	—0 [illegible]3.78	— 1 [illegible]4.4	70	1 41 [illegible]3.84	—23 52 13.1	Pretty ft.
		07.8	[illegible]	17.8		—0 [illegible]3.90	—3 15.7	
72	686	1907.3	—0 13.58	— 2 04.6	70	1 41 [illegible]3.84	—1 15 38.1	[illegible]
		08.9	13.49	05.5		+0 14.21	—2 05.0	
73		1907.0	—0 [illegible]3.75	— 2 [illegible]3.0	73	1 44 01.01	—24 22 05.8	
		08.4	14.09	[illegible]7.4		[illegible]	[illegible]1.5	

No.							
				69		— 8 51 30.4	Very ft. sm. stellar.
			33.5				
		08.9					
		1900.0	+ 1 22.0				
		07.9					
			19				
	702	1907.9	—0 08.50	74			Very ft.
						+9 45.0	
				69			Very ft.
			21.9		+2 35.02		
		34.85					
				75		—14 00 08.8	Very br.
						—4 47.7	
		—1 37.05	+10 27.1				
						+10 26.7	
		+3 26.70		73		—24 16 03.7	Ft.
			03.9		+3 26.70		
		1907.9	—10 00.8	77			Pretty ft.
		20.32					
							Pretty br. sm.
		08.0 26.83	48.5				
		1906.9		81		— 4 47 23.7	Pretty ft.
		07.8	03.9		—1 44.75	—10 06.8	
		1907.9	—13 09.0	77		— 9 19 58.0	Ft.
		08.9	12.4			—13 09.9	
		—0 40.32				— 5 42 55.7	Very ft.
		08.9 40.70				—10 28.4	
		+0 07.63		83		—11 47 04.1	Very ft.
		08.9 07.08			+0 07.36	—12 57.0	
			+ 4 23.1				Br. elong.
		07.8	23.4		+1 35.07	+4 23.7	
	787		+ 8 12.8	84	1 54 54.89		Pretty ft.
		08.9	11.9		+0 57.58	+8 12.7	
							Pretty ft.
		07.9	08.0			+12 08.1	
		1907.9	+0 25.85 — 0 44.6	86	1 58 10.04		Very ft.
			26.25		+0 26.05	—0 44.7	Swift's α 13^s too great.
		—0 32.32	+ 4 04.7	89		— 8 10 59.4	Ft.
		08.9 32.48	06.1			+4 05.2	
		1907.9		89			Ft.
		08.9 16.78	36.2			+5 36.3	
		08.9					
	833	1907.9	— 5 26.1	88			Ft.
		08.9 01.55				—5 25.8	

No.	N. G. C. No.	Epoch	Observed Δα	Observed Δδ	Star	Star Place, and Difference, 1900 α	Star Place, and Difference, 1900 δ	Description and Notes.
			M S.	′ ″		H. M. S.	′ ″	
91	835	1907.9	+1 05.47	— 5 34.1	88	2 03 24.61	−10 30 59.3	Ft.
		08.9	05.70	32.0		+1 05.59	—5 32.8	
—	Appen	1907.9	+1 32.30	+10 45.5	87	2 03 01.54	−10 19 54.5	Pretty ft. lrg.
			+1 32.29	+10 45.9				Safford's α 4ˢ too small
92		1907.9	—0 03.74	+11 15.8	90	2 04 37.01	−10 20 33.3	
		08.9	03.65	22.6		—0 03.70	+11 10.2	
93	838	1907.9	+1 19.42	— 6 12.9	88	2 03 24.61	—10 30 59.3	Very ft. sm.
		08.9	19.50	07.3		+1 19.48	—6 09.7	
94	839	1908.9	+1 23.98	— 8 25.8	88	2 03 24.61	—10 30 59.3	Very ft.
		09.9	24.10	28.5		+1 24.07	—8 26.8	
95	842	1907.9	+0 36.42	+ 5 53.9	89	2 04 17.24	— 8 19 59.4	Very ft.
		08.9	36.34	55.2		+0 36.38	+5 54.7	
96	850	1907.9	—0 08.20	+ 5 08.8	91	2 06 16.41	— 2 02 36.5	Ft.
		08.9	07.85	13.5		—0 08.03	+5 11.1	
97	853	1906.9	—2 11.60	—14 35.7	92	2 08 58.06	— 9 31 58.7	Pretty ft. sm.
		07.9	11.40	36.2		—2 11.50	—14 36.6	
98	856	1907.9	—0 35.40	+ 0 52.7	93	2 09 07.62	— 1 12 04.1	Ft. diffuse.
		08.9	35.32	50.3		—0 35.36	+0 55.8	Swift's α 14ˢ too great.
99	863	1907.9	+0 20.12	— 1 59.5	93	2 09 07.62	— 1 12 04.1	Very ft.
		08.9	20.37	55.6		+0 20.25	−1 57.4	
100	873	1907.9	—0 30.72	— 5 54.3	94	2 12 10.78	—11 42 58.3	Ft.
		08.9	30.47	48.8		—0 30.60	—5 51.7	
101	881	1906.0	+0 21.34	— 2 05.8	95	2 13 25.52	— 7 04 00.4	Ft.
		07.9	21.92	00.0		+0 21.63	—2 02.8	
102	883	1906.0	—0 00.93	+ 3 20.2	96	2 14 08.26	— 7 18 29.6	Pretty ft.
		07.9	01.04	20.3		—0 00.98	+3 20.2	
103	895	1907.9	—0 16.58	+10 35.0	98	2 16 53.10	— 6 09 21.3	Ft. lrg.
		08.9	16.35	39.6		—0 16.48	+10 37.7	
104	899	1908.0	+1 46.30	+ 0 23.1	97	2 15 29.36	—21 17 13.1	Pretty br.
		08.9	46.42	16.8		+1 46.38	+0 20.5	
105	907	1908.0	—2 09.92	— 5 02.3	101	2 20 35.20	—21 05 03.2	Ft.
		08.9	09.32	01.4		—2 09.64	—5 02.6	
106	908	1907.0	+0 34.55	+ 1 27.1	99	2 17 52.05	—21 42 49.1	Pretty br. lrg. diffuse.
		08.0	34.66	23.8		+0 34.60	+1 25.6	
107	922	1908.0	+0 16.82	+14 45.6	100	2 20 16.30	—25 20 40.0	Very ft.
		08.0	16.77	42.4		+0 16.77	+14 44.0	
108	936	1906.0	—0 20.14	+ 0 57.8	103	2 22 52.19	— 1 37 10.7	Very br.
						—0 20.14	+0 57.7	
108		1907.9	+0 [illegible]	7 53.4	102	2 22 16.77	— 1 28 25.1	
						+0 15.95	−7 53.4	
109	945	1908.0	+0 01.68	+ 5 03.8	104	2 23 43.79	−11 04 17.8	Very ft.
		08.9	01.46	07.2		+0 01.54	+5 05.5	
110	955	1908.0	−1 35.03	+ 5 04.7	107	2 27 03.11	— 1 38 13.5	Pretty br. sm.
		08.9	35.28	[illegible]		—1 35.18	+5 01.9	

No.	N.G.C. No.	Epoch	Δα	Δδ		α	δ	Description and Notes
			M. S.			H. M. S.		
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	105	[illegible]	[illegible]	Pretty ft. pretty lrg.
		08.0	[illegible]	42.7		[illegible]	[illegible]	
[illegible]	[illegible]	1907.0	[illegible]	[illegible]	[illegible]	2 30 [illegible]	[illegible]	[illegible]
		08.0	40.08	13 57.2		[illegible]	—13 58.4	
[illegible]	[illegible]	1907.0	[illegible]	[illegible]	[illegible]	2 33 20.10	[illegible]	Very ft. [illegible]
		08.0	[illegible]	20.2		—0 [illegible]	[illegible]	
113		1907.0	—0 20.50	[illegible]	111	[illegible]	[illegible]	
		[illegible]	20.45	[illegible]		[illegible] 20.46	[illegible]	
114	[illegible]	[illegible]	[illegible]	— 2 31.0	100	[illegible]	— 7 04 07.4	Pretty br. lrg.
		07.0	[illegible]	[illegible]		+0 [illegible]	[illegible]	
115	[illegible]	1907.8	+0 10.17	+ 6 48.7	112	2 34 [illegible]	[illegible]	Pretty [illegible]
		08.0	00.85	48.7		+0 10.00	+6 48.7	
116	[illegible]	[illegible]	+0 18.12	[illegible]	[illegible]	2 35 [illegible]	— 6 06 32.0	Pretty ft. sm.
		[illegible]	18.00	21.0		[illegible] 18.34	+14 20.2	
117	[illegible]	1908.0	[illegible]	[illegible]	[illegible]	[illegible] 17.82	—11 37 57.4	Pretty br. stellar
		08.0	[illegible]	28.5		[illegible] 21.31	—4 26.6	
118	[illegible]	1906.0	[illegible]	— 0 13.7	[illegible]	[illegible]	[illegible]	Pretty br.
		[illegible]	45.42	13.8		[illegible]	[illegible]	
		[illegible]	[illegible]	18.1				
119	[illegible]	[illegible]	[illegible]	[illegible]	116	[illegible]	[illegible]	Very br.
		[illegible]	[illegible]	44.1		[illegible]	—0 47.4	
120	[illegible]	[illegible]	—0 21.83	[illegible]	[illegible]	2 39 07.17	[illegible]	Pretty ft.
		[illegible]	[illegible]	38.3		—0 22.07	[illegible]	Swift's α 9ˢ too great.
121	[illegible]	[illegible]	[illegible]	—11 45.8	[illegible]	2 39 28.66	[illegible]	Pretty br.
		[illegible]	03.48	47.1		—0 03.12	[illegible]	
		[illegible]	03.18	49.6				
122	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2 40 29.26	[illegible]	Very ft.
		[illegible]	[illegible]	35.7		—0 06.26	[illegible]	Swift's [illegible] too small.
123	[illegible]	1906.1	[illegible]	[illegible]	[illegible]	2 42 [illegible]	[illegible]	Very br.
		[illegible]	[illegible]	[illegible]		—0 [illegible]	+3 20.7	
		[illegible]	[illegible]	22.0				
		[illegible]	[illegible]	20.7				
124	[illegible]	1907.0	[illegible]	[illegible]	[illegible]	[illegible] 14.08	[illegible]	Pretty br. lrg.
		08.0	[illegible]	17.9		+0 [illegible]	—6 18.2	
125	[illegible]	[illegible]	[illegible]	[illegible]	121	2 42 19.88	— 0 37 36.2	Ft. lrg. diffuse.
		08.9	[illegible]	29.8		[illegible]	—2 30.9	
126	[illegible]	1908.0	[illegible]	+12 19.2	[illegible]	[illegible]	[illegible]	Very br.
		08.9	[illegible]	[illegible]		+0 [illegible]	+12 21.4	
127	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	2 42 19.88	— 0 37 36.2	Very ft. sm.
		[illegible]	[illegible]	38.2		[illegible] 01.22	[illegible]	
128	1121	[illegible]	[illegible]	[illegible]	[illegible]	[illegible] 45 11.18	— 2 22 30.2	Ft. sm. stellar.
		[illegible]	[illegible]	[illegible]		[illegible] 23.68	+13 38.7	Swift's α 13ˢ too great.
129	1125	[illegible]	[illegible]	— 1 58.7	124	[illegible] 07.03	[illegible]	Very ft.
		[illegible]	[illegible]	[illegible]		—1 06.48	[illegible]	

No.	N. G. C. No.	Epoch.	Observed $\Delta\alpha$	Observed $\Delta\delta$		Star, Place, and Difference. 1900 α	Star, Place, and Difference. 1900 δ	Description and Notes.
			M. S.	′ ″		H. M. S.	′ ″	
130	1152	1906.0	—0 10.59	— 1 03.8	123	2 48 03.48	— 1 40 04.1	Ft.
		08.0	16.65	03.1		—0 16.62	—1 03.6	
131	1140	1908.0	+1 19.05	+ 5 51.4	125	2 48 23.00	—10 31 56.3	Pretty br.
		08.9	19.27	54.3		+1 19.19	+5 53.3	
131		1908.9	+0 28.90	— 3 50.6	126	2 49 13.96	—10 22 15.6	
						+0 28.01	—3 50.4	
132	1143	1908.0	+0 23.30	— 7 45.5	127	2 49 40.14	— 0 27 22.4	Ft.
		09.0	22.72	42.9		+0 23.93	—7 44.0	
133	1144	1908.0	+0 25.40	— 8 00.5	127	2 49 40.14	0 27 22.4	Ft. A little brighter than 132.
		09.0	25.32	01.0		+0 25.38	—8 00.6	
134	1154	1909.0	+1 12.98	+ 0 47.1	128	2 52 04.73	—10 46 39.3	Very ft.
		09.9	13.02	45.8		+1 13.01	+0 47.1	
135	1155	1909.0	+1 18.47	+ 1 27.9	128	2 52 04.73	10 46 39.3	Very ft.
		09.9	18.62	30.8		+1 18.56	+1 30.0	
136	1162	1908.0	—0 18.80	+10 11.5	129	2 54 28.21	—12 58 05.1	Pretty ft.
		08.9	18.63	15.4		—0 18.72	+10 13.2	
137	1172	1907.0	—0 07.82	— 0 39.1	130	2 57 01.70	—15 13 15.8	Pretty ft.
		08.0	07.52	37.8		—0 07.67	—0 38.5	
138	1187	1908.1	+0 13.50	— 3 27.6	131	2 57 57.10	—23 12 06.8	Pretty ft. diffuse.
		08.9	13.08	37.7		+0 13.75	—3 32.6	
139	1199	1908.0	—1 03.68	— 9 56.9	133	3 00 01.60	—15 50 20.8	Pretty br.
		08.9	03.60	57.7		—1 03.63	—9 57.8	
140	1200	1908.1	—0 55.52	+10 31.8	134	3 00 03.14	12 33 32.7	Pretty ft.
		08.9	55.45	37.1		—0 55.50	+10 33.3	
141	1201	1906.1	—0 09.92	— 3 09.1	132	2 59 57.66	—26 24 29.6	Pretty br.
						—0 09.92	—3 09.2	
141		1908.0	—0 34.50	—17 35.0	135	3 00 22.47	—26 10 04.3	
						—0 34.46	—17 35.3	
142	1208	1907.0	—2 16.05	— 0 03.4	137	3 03 30.68	— 9 55 42.4	Pretty br.
		08.0	15.35	02.9		—2 15.60	—0 04.2	
		08.0	15.37	—				
143	1209	1908.0	+1 21.25	— 0 34.2	133	3 00 01.66	15 50 20.8	Br. sm.
		09.0	21.25	36.7		+1 21.28	—0 34.8	
144	1211	1906.0	1 18.87	+ 0 49.5	136	3 03 05.79	— 1 11 40.9	Pretty br.
		08.0	18.93	48.8		-1 18.91	+0 48.7	
145	1222	1908.0	0 31.03	+16 40.2	138	3 04 20.00	3 36 57.0	Very ft. sm.
		09.0	31.18	41.6		0 31.14	+16 40.6	
146	1232	1908.0	0 31.08	— 37.7	139	3 05 46.05	—20 56 05.7	Pretty br. lrg. diffuse.
		09.0	30.1	36.7		—0 30.76	—1 37.5	
147	1238	1906.1	0 36.64	6 01.1	141	3 06 11.38	—11 07 30.4	Very ft.
		08.1	36.75	01.3		—0 36.70	0 03.5	Swift's α or δ too great.
148	1241	1908.1	+0 00.10	3 02.7	140	3 06 22.97	0 15 01.8	Ft. pretty lrg.
		09.0	00.15	2 58.4		+0 00.07	3 00.5	

		Epoch.						Remarks and Notes
			M. S.			H. M. S.		
								Ft.
			23.17	30.2				
								Pretty ft.
			01.20					
								Pretty ft.
				+ 1 46.0	144			
			09.0					
							—19 25 57.2	Very ft.
			06.30	57.4		+1 06.14		
		1906.1						
		08.1		08.1				
				+13 45.5			—26 30 11.1	Pretty br. sm.
		09.0						
						3 14 00.20		Ft. sm. stellar.
		09.0	13.80	10 02.2			+10 01.4	
		1906.1					— 2 40 47.3	Ft.
							+0 04.9	
							+8 14.7	
		1908.0						Pretty br. lrg.
						+0 08.11		
						3 19 02.35		Pretty ft.
				50.7				
		1908.1				3 17 22.13		Ft.
		09.0	25.20	14.9		+2 25.23		
			+2 25.22			3 17 22.13		Ft.
				39.9		+2 25.30		
								Pretty ft.
		09.0	07.88	18.7				
			+0 28.75	+ 6 25.6		3 21 00.32	—18 03 01.9	Ft.
			28.30				+6 25.6	
			—1 29.30	+ 3 34.3		3 23 20.31	—21 44 43.2	Very br.
		09.0	29.25	36.8		—1 29.30	+3 34.7	
			+0 08.84			3 23 06.73	— 8 53 08.5	Pretty ft. pretty lrg.
		09.0	08.40	58.6		+0 08.60		
		1908.0	+0 25.35					Pretty br.
						+0 25.44	—2 38.3	
			+0 50.00			3 23 25.90	—31 34 06.9	Pretty br.
								N. G. C. 1340 δ —10′. 1344 is identical
			—0 27.45	+ 0 56.0			—31 25 46.4	
						—0 27.46		
								Very ff. [illegible] 13 mag. star.
		09.0	48.85	47.5		+0 48.71	+0 46.0	
								Pretty br.
			56.00					

No.	N.G.C. No.	Epoch	Observed $\Delta\alpha$	Observed $\Delta\delta$	Star	Star, Place, and Difference. α 1900	Star, Place, and Difference. δ 1900	Description and Notes.
			M. S.	′ ″		H. M. S.	° ′ ″	
169	1354	1908.1	—1 16.02	— 5 56.9	165	3 29 07.38	— 1[illegible] 37.3	Very ft.
		09.0	16.28	59.5		—1 16.15	[illegible] 58.9	
170	1355	1908.1	—0 49.10	+ 3 27.5	166	3 29 14.94	— 5 23 38.0	Pretty ft.
		09.1	48.76	21.7		—0 48.94	+3 24.2	
171	1357	1907.0	—0 06.40	— 3 16.8	164	3 28 42.60	—13 50 47.6	Pretty ft.
		08.1	06.48	18.7		—0 06.43	—3 17.8	
172	1358	1908.1	—0 32.62	— 1 58.3	166	3 29 14.94	— 5 23 38.0	Pretty ft. sm.
		09.1	32.60	55.7		—0 32.61	—1 57.3	
173	1359	1908.1	+1 59.90	—10 28.5	162	3 27 18.86	—19 39 21.9	Very ft. lrg.
		09.1	2 00.25	23.0		+2 00.13	10 24.6	
174	1362	1908.1	—0 05.27	+ 5 10.1	167	3 29 30.70	—20 42 21.2	Ft.
		09.1	04.78	13.6		—0 05.04	+5 14.8	
175	1365	1908.0	—1 29.42	—12 14.4	169	3 31 17.12	—36 16 14.1	Very br.
		09.0	29.17	18.7		—1 29.28	—12 17.3	
176	1371	1906.1	—0 16.32	— 2 19.8	168	3 31 00.48	—25 13 44.8	Pretty br.
		08.0	16.50	12.6		—0 16.36	—2 16.5	
		08.1	16.32	16.0				
		10.0	16.30	16.9				
177	1374	1908.1	—3 26.30	— 1 33.7	176	3 34 51.68	—35 31 49.9	Pretty ft.
		09.0	25.80	44.2		—3 26.06	—1 41.8	
		09.1	25.88	41.6				
178	1377	1908.1	—0 47.34	— 0 24.0	172	3 33 00.55	—21 13 36.2	Very ft.
		09.0	47.00	23.1		—0 47.18	—0 23.9	
179	1380	1908.1	—2 15.72	+13 28.5	176	3 34 51.68	—35 31 49.9	Br.
		09.0	15.93	29.0		—2 15.02	+13 27.5	
180	1383	1908.1	+1 26.10	+12 42.8	171	3 31 41.86	—18 52 46.7	Pretty ft.
		09.0	26.35	42.9		+1 26.19	+12 43.6	
181	1385	1908.1	+1 29.68	+ 0 55.5	170	3 31 40.79	—24 50 50.1	Pretty br.
		09.1	30.10	1 01.1		+1 29.91	+0 59.2	
182	1393	1908.1	+2 26.22	+ 7 26.6	171	3 31 41.86	—18 52 46.7	Ft.
		09.0	25.98	28.0		+2 26.10	+7 28.7	
183	1395	1906.1	+0 01.17	+ 3 31.6	174	3 34 07.79	—23 24 49.3	Br.
		08.1	01.25	31.8		+0 01.20	+3 31.7	
184	1398	1908.1	+0 31.00	+ 1 47.0	173	3 34 07.81	—26 41 35.5	Pretty br.
		09.1	31.25	43.2		+0 31.12	+1 45.8	
185	1399	1908.1	—0 12.20	—14 45.5	176	3 34 51.68	—35 31 49.0	Very br.
		09.1	11.93	44.6		—0 12.02	—14 45.1	
186	1401	1908.1	—1 06.72	+11 18.0	180	3 36 06.98	—23 14 18.0	Very ft.
		09.1	06.38	15.8		—1 06.60	+11 14.7	
187	1400	1908.1	+1 02.00	+ 3 35.9	173	3 33 58.90	—19 04 25.6	Pretty br.
		09.0	02.10	35.5		+1 02.05	+3 36.4	
188	1404	1908.1	+0 11.08	[illegible] 20.1	176	3 34 51.68	—35 31 49.9	Br.
						+0 11.17	—23 20.0	

No.	N.G.C. No.	Epoch	Measured Δα	Measured Δδ	[illegible]	α	δ	Description and Notes
			M. S.			h. m. s.		
[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	3 35 00.80	[illegible]	
		09.0	[illegible]	[illegible]		[illegible]	+2 28.0	
[illegible]	[illegible]	[illegible]	[illegible]	+10 06.6	[illegible]	3 33 58.00	[illegible]	Very br.
		[illegible]	42.88	06.2		[illegible]	[illegible]	
[illegible]	[illegible]	1908.1	[illegible]	[illegible]	177	[illegible]	[illegible]	Ft.
		[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	—22 50 33.1	Pretty br.
		[illegible]	[illegible]	[illegible]		[illegible]	—2 38.4	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	Pretty ft.
		[illegible]	40.02	01.5		[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	—13 43 02.3	Ft. large diffuse.
		[illegible]	[illegible]	20.9		[illegible]	—5 32.4	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	—22 17 53.6	Pretty ft.
		[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible] 22.05	[illegible]	[illegible]	3 40 50.43	—22 17 21.1	Pretty br.
		[illegible]	22.08	[illegible]		—0 22.07	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	3 40 03.03	[illegible] 18 36 [illegible]	Pretty br.
		[illegible]	[illegible]	32.2		[illegible]	[illegible] 33.8	
[illegible]	[illegible]	[illegible]	[illegible]	— 0 46.2	188	3 40 56.12	— 4 23 28.3	Very ft.
		[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	Ft. sm. stellar.
		[illegible]	[illegible]	[illegible]		+2 38.05	+5 03.1	
[illegible]	[illegible]	1909.1	[illegible]	[illegible]	186	3 40 32.39	[illegible]	Pretty br.
						+0 55.76	—5 26.6	
[illegible]		[illegible]	[illegible]	[illegible]	188	3 40 [illegible]	[illegible]	
						[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	Pretty br.
		[illegible]	[illegible]	[illegible]		+0 09.98	—2 30.0	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	3 50 10.95	—20 45 18.7	Very ft.
		[illegible]	[illegible]	[illegible]		+0 03.32	—2 32.2	
[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	3 50 23.25	—20 46 55.9	
		09.1	08.83	[illegible]		—0 08.89	—0 56.8	
[illegible]	[illegible]	[illegible]	[illegible]	+ 0 40.4	[illegible]	3 55 22.67	— 9 36 48.5	Very ft.
		[illegible]	[illegible]	[illegible]		+2 25.82	+0 44.6	[illegible] too small
[illegible]	Nova [illegible]	1906.1	[illegible]	[illegible]	[illegible]	4 03 59.63	[illegible]	Ft. diffuse.
		07.1	[illegible]	02.3		[illegible]	[illegible]	Probably N. G. C. 1518, the position of which follows 1m.
		08.1	[illegible]	2 58.5				
[illegible]	[illegible]	[illegible]	—0 02.46	[illegible]	[illegible]	4 03 59.63	[illegible]	Pretty br. sm.
		07.1	02.40	36.6		—0 02.40	+4 36.1	
		[illegible]	02.27	[illegible]				
[illegible]	[illegible]	[illegible]	+1 58.62	[illegible]	[illegible]	4 07 37.03	[illegible]	Very br. planetary.
		07.1	58.70	06.7		+1 58.66	+2 07.5	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	4 08 28.11	—31 50 00.7	Pretty br.
		[illegible]	18.87	50.2		[illegible]	—3 49.5	

No.	N. G. C. No.	Epoch.	Observed Δα	Observed Δδ		Reduced to 1900.0 α	Reduced to 1900.0 δ	Description and Notes.
			M. S.	′ ″		H. M. S.	° ′ ″	
207	1552	1906.1	+3 30.82	+ 2 45.0	196	4 23 41.44	— 0 58 45.3	Very ft.
		07.1	30.71	46.1		+3 30.85	+2 47.2	
208	1568	1906.1	+0 25.23	— 0 17.5	197	4 18 54.82	— 0 58 25.9	Ft. sm.
		07.1	25.37	09.8		+0 25.14	—0 11.6	Swift's α 21ˢ too small.
		08.1	24.82	08.6				
209	1576	1908.1	—0 20.37	+ 8 45.6	198	4 27 [illegible]	— 3 59 35.7	Very ft.
		09.1	[illegible]	46.4		—0 [illegible]	+8 45.7	
210	1594	1907.1	[illegible]	+ 4 44.	201	4 27 57.72	— 5 56 14.4	Very ft.
		08.1	00.25	47.0		—2 00.36	—4 30.4	Swift's α 17ˢ too great.
		09.1	00.15	44.1				
211	1600	1906.1	—0 41.51	— 3 [illegible]	200	4 27 25.35	— 5 15 04.9	Pretty br.
		07.1	41.3[illegible]	2 57.0		—0 41.41	—2 58.9	
212	1609	1906.1	+0 46.02	+ 0 39.8	199	4 27 [illegible]	— 4 35 44.5	Very ft.
		07.1	45.9[illegible]	35.3		+0 45.96	+0 37.9	
213	1611	1906.1	+1 06.96	+ 5 11.6	199	4 27 [illegible]	— 4 35 44.5	Very ft.
		07.1	06.93	15.[illegible]		+1 06.94	+5 14.1	
214	1614	1906.1	+0 54.45	+ 0 40.6	202	4 28 17.49	— 8 48 02.1	Pretty ft.
		07.1	54.60	44.6		+0 54.52	+0 43.1	Swift's α 21ˢ too great.
215	1622	1906.1	+0 17.65	+ 0 46.1	203	4 31 10.27	— 3 33 24.9	Pretty ft.
		08.0	17.3[illegible]	53.3		+0 17.43	+0 52.3	
		08.1	17.38	54.0				
216	1625	1906.1	+0 47.27	+ 3 02.3	203	4 31 10.27	— 3 33 24.9	Ft. elong.
		08.1	47.28	03.9		+0 47.28	+3 03.5	
217	1628	1908.1	—1 29.48	+ 5 20.2	206	4 34 09.28	— 5 00 10.2	Very ft. elong.
		09.1	29.45	24.4		—1 29.48	+5 21.3	
218	1635	1906.1	+1 24.09	+ 0 29.9	205	4 33 38.18	— 0 45 07.4	Ft.
						+1 24.09	+0 30.6	
218		1908.1	—0 00.96	— 6 33.8	207	4 35 02.99	— 0 38 04.8	
						—0 00.94	—6 33.8	
219	1630	1906.1	—1 39.02	+ 0 43.8	209	4 37 31.03	— 8 48 51.9	Ft.
		08.1	39.30	41.6		—1 39.10	+0 41.8	
220	1637	1906.1	+3 41.04	+ 0 35.5	204	4 32 46.36	— 3 03 42.4	Pretty ft. diffuse.
		07.1	41.11	34.9		+3 41.07	+0 37.2	
221	1638	1906.1	+0 39.66	+ 8 29.4	208	4 35 54.37	— 2 08 37.1	Ft.
		08.0	39.22	32.1		+0 39.42	+8 31.1	
222	1646	1906.1	+0 18.35	— 1 45.4	212	4 39 10.96	— 8 41 24.8	Ft. sm.
		07.1	18.50	47.3		+0 18.43	—1 43.2	
223	1653	1906.1	+2 27.00	— 2 26.6	211	4 38 [illegible]	— 2 32 05.5	Ft.
		08.0	26.70	26.9		+2 26.86	—2 27.0	
223		1908.0	—0 41.62	—10 40.8	213	4 41 27.40	— 2 23 53.0	
						—0 41.58	—10 41.2	
224	1659	1906.1	+3 16.85	— 1 [illegible]	210	4 38 [illegible]	— 4 56 26.2	Pretty ft.
						[illegible]	—1 54.1	
224		1908.1	—0 08.02	—11 03.5	214	4 41 [illegible]	— 4 47 15.5	
						—0 [illegible]	—11 03.6	

No.	N. G. C. No.	Epoch	Observed $\Delta\alpha$	Observed $\Delta\delta$	No.	Epoch 1900 α	Epoch 1900 δ	Description and Notes.
			m s	″		h m s	° ′ ″	
[illegible]	[illegible]	1907.1	−0 10.22	− 0 33.7	213	4 43 [illegible]	−0 [illegible] 56.0	Pretty ft.
		08.2	10.30	31.9		[illegible]	[illegible]	
[illegible]	[illegible]	1907.1	−0 48.04	−10 3.3	210	4 46 [illegible]	[illegible] 45.0	Very ft. Follows 1 to next star.
		08.2	48.16	3.6		−0 48.20	33.7	
[illegible]	1881	1906.1	[illegible]	− 5 13.7	217	4 47 [illegible]	[illegible] 25.4	Pretty ft.
		08.2	00.05	4 01.1		+0 00.04	+3 58.3	
		09.1	[illegible]	1 59.8				
[illegible]	[illegible]	1906.1	[illegible] 11.87	− 2 47.6	218	4 51 48.42	− 4 [illegible] 18.8	Br.
		08.2	11.98	02.8		+0 11.93	04.9	
[illegible]	[illegible]	1908.1	[illegible] 48.04	+ 4 04.8	220	4 53 07.74	−0 47 36.2	Ft.
		09.2	48.16	4.5		+0 48.16	+4 04.0	
[illegible]	[illegible]	1907.1	+0 00.40	[illegible] 41.2	226	4 53 44.68	−20 20 22.7	Pretty ft.
		08.2	00.00	42.1		+0 00.70	−0 43.8	N. of 2 and 0 too great.
[illegible]	1710	1908.1	[illegible] 41.80	− 2 38.6	208	4 53 46.30	−0 23 53.1	Pretty ft.
		09.2	41.92	40.0		+0 41.80	−2 19.9	
231	[illegible]	[illegible]	−0 40.32	− 4 10.5	223	4 55 08.20	−0 20 36.1	
		08.2	40.32	11.5		−0 40.31	−4 11.4	
[illegible]	1711	1908.2	+0 03.38	[illegible] 4 39.7	222	4 54 28.49	7 55 57.3	Pretty ft.
		09.1	03.[illegible]	41.9		+0 03.32	−4 40.3	
233	1720	1908.1	+0 24.24	+ 1 36.4	222	4 54 28.49	[illegible] 55 57.3	Ft.
		07.2	24.10	36.3		+0 24.17	+1 36.5	
234	1730	1908.2	−0 29.38	− 1 29.6	224	4 55 20.57	−15 56 53.3	Ft.
		09.2	29.55	29.2		−0 29.47	−1 29.7	
235	1770	1906.1	[illegible] 48.01	− 0 31.3	227	5 02 20.73	[illegible] 9 16 34.9	Pretty br.
		07.1	48.00	28.[illegible]		−1 48.05	−0 30.7	
236	1784	1908.2	−1 56.62	− 0 05.0	229	5 02 43.7[illegible]	−12 00 24.9	Pretty ft. diffuse.
		09.2	55.90	08.4		−1 56.26	−0 08.4	
237	1788	1906.1	[illegible] 33.67	− 2 36.6	228	5 02 20.79	[illegible] 3 26 37.6	Pretty br. sm. stellar.
		07.1	33.35	39.7		−0 33.50	[illegible] 2 36.6	
237		1907.1	+0 28.12	[illegible] 1 31.8	226	5 01 28.05	[illegible] 3 31 07.3	
						+0 28.11	[illegible] 1 32.1	
238	1800	1907.1	[illegible] 52.60	[illegible] 8 16.9	225	5 00 45.87	[illegible] 32 13 30.3	Ft.
		08.2	52.84	12.8		[illegible] 1 53.20	+8 16.1	
241	1814	1907.1	−0 14.47	− 3 57.2	230	5 07 47.45	−15 44 37.3	Pretty br.
		08.1	14.37	54.4		−0 14.41	−3 56.0	
240	1843	1906.1	+0 45.16	[illegible] 6 30.5	231	5 08 38.42	−10 45 10.0	Ft. diffuse.
		07.2	45.15	32.4		+0 45.17	[illegible] 8.9 31.9	
243	1888	1906.1	+1 01.62	− 1 06.4	233	5 16 [illegible]	−11 34 41.4	Pretty ft. diffuse.
		08.1	01.62	02.2		[illegible] 1 01.62	−1 03.6	
244		1907.1	+1 36.55	+ 7 16.8	232	5 16 18.13	−11 42 54.7	
		07.1	[illegible]	18.4		[illegible] 1 36.54	+7 18.6	
242	1904	1906.1	−0 05.28	+ 9 50.1	235	5 20 10.02	−24 46 51.0	Br. lrg.
		07.2	05.70	50.4		−0 05.52	+9 50.2	

No.	N. G. C. No.	Epoch.	Observed $\Delta\alpha$	Observed $\Delta\delta$	Star.	Place and Difference for α	Place and Difference for δ	Description and Notes.
			M. S.	′ ″		H. M. S.	° ′ ″	
242		1906.1	—0 03.54	— 9 26.7	234	5 20 07.38	—21 27 35.1	
		07.1	02.72	22.6		—0 03.10	—9 24.5	
		07.1	03.13	24.3				
243	1024	1906.1	—0 34.72	+ 2 41.8	237	5 23 41.78	— 5 26 30.4	Very ft. pretty lrg.
		07.1	34.17	52.4		—0 34.47	+2 51.3	
		07.1	34.50	54.1				
243		1906.1	+0 23.03	— 3 13.9	236	5 [illegible] 13.84	— 5 20 24.1	
		07.1	23.40	14.7		+0 23.07	—3 14.1	
244	1064	1907.1	+0 27.68	—11 33.8	238	5 28 40.65	—21 49 23.4	Br. sm. stellar.
		08.1	27.55	37.2		+0 27.65	—11 35.1	
245	1069	1908.1	+1 21.60	— 0 39.5	239	5 32 55.50	— 6 46 05.7	Nebulous star.
						—1 21.60	—0 40.5	
245		1906.1	—1 25.32	+ 0 11.8	240	5 32 50.31	— 6 46 54.4	
						—1 25.32	+0 10.8	
246	2076	1907.1	—0 10.90	— 8 10.4	241	5 42 31.25	—16 41 00.0	Very ft. diffuse.
		08.2	10.78	05.3		—0 10.81	—8 07.9	N. G. C. δ 2′ too small.
247	2089	1907.1	—1 31.25	— 1 27.0	242	5 44 57.73	—17 30 45.8	Ft. sm. stellar.
		08.2	31.17	22.9		—1 31.26	—1 26.0	
248	2110	1906.1	+0 49.42	+ 3 46.8	243	5 46 32.26	— 7 32 41.4	Ft.
		07.2	49.52	50.0		+0 49.46	+3 48.9	
249	2179	1907.1	+1 04.85	+ 4 03.3	244	6 02 43.70	—21 48 01.3	Ft.
		08.2	04.23	05.9		+1 04.66	+4 03.1	
		09.1	04.95	3 57.9				
250	2183	1907.1	+1 15.87	+ 6 57.4	245	6 04 38.73	— 6 18 30.4	Very ft.
		08.2	15.37	56.1		+1 15.70	+6 57.7	
251	2196	1906.1	+1 34.33	+ 2 34.5	246	6 06 21.78	—21 49 28.4	Pretty br.
		07.1	34.27	38.1		+1 34.30	+2 32.7	
		08.2	34.30	37.9				
252	2206	1906.1	—0 14.70	—10 59.0	248	6 12 15.06	—26 32 53.6	Ft.
		07.1	14.32	57.1		—0 14.47	—10 58.7	
253	2207	1906.1	+1 00.83	— 5 36.8	247	6 11 06.06	—21 14 41.5	Pretty br. pretty lrg.
		07.1	01.20	37.3		+1 01.03	—5 36.3	
254	2211	1907.2	+0 11.70	— 7 16.5	240	6 13 56.21	—18 22 32.5	Very ft. sm.
		08.2	12.08	21.6		+0 11.91	—7 18.9	N. G. C. α 17^s too great.
255	2217	1906.1	+2 27.85	— 2 51.4	250	6 15 13.18	—27 08 22.7	Br.
		07.1	28.20	48.2		+2 28.03	—2 48.4	
256	2223	1906.1	—0 56.28	+ 5 17.2	251	6 21 21.23	—22 52 17.0	Ft pretty lrg.
		07.1	56.67	14.3		—0 56.49	+5 14.3	
257	2267	1906.1	—0 45.80	—11 46.1	252	6 37 54.10	—32 11 34.7	Pretty br. stellar.
		07.1	45.70	43.6		—0 45.74	—11 45.3	N. G. C. α 6^s too small.
258	2272	1906.1	—2 10.58	— 6 56.6	254	6 40 52.45	—27 14 53.9	Very ft.
		07.1	09.97	53.7		—2 10.16	—6 58.2	
		07.2	10.01	7 00.4				

No.	N.G.C.	Epoch.	Observed Δα	Observed Δδ		Comparison Star α	Comparison Star δ	Description and Notes.
			M. S.			H. M. S.		
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	6 [illegible]	[illegible]	[illegible]
		07.1	22.45	[illegible]		[illegible] 22.13	—7 30.5	
		07.1	[illegible]	[illegible]				
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	6 41 [illegible]	[illegible]	[illegible] Double [illegible]
		[illegible]	[illegible]	[illegible]		[illegible] 41.77	[illegible]	N. G. C. [illegible] too small.
[illegible]	[illegible]	[illegible]	—1 42.84	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	[illegible] too great.
[illegible]	[illegible]	1906.1	[illegible]	— 0 06.4	[illegible]	6 54 34.34	[illegible]	[illegible]
		07.1	20.77	02.8		[illegible]	[illegible]	
[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	6 55 [illegible]	— 7 39 07.2	
						[illegible] 04.04	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	257	6 54 34.34	[illegible]	Pretty ft.
		[illegible]	[illegible]	[illegible]		+0 [illegible]	[illegible]	
[illegible]		[illegible]	—0 26.75	+ 0 50.5	258	6 55 18.00	— 7 39 07.2	
						[illegible] 26.75	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	6 58 [illegible]	[illegible]	Pretty ft.
		[illegible]	20.42	10.0		+0 [illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	—0 28.20	[illegible]	[illegible]	[illegible]	—27 21 30.7	Ft.
		[illegible]	28.27	33.6		[illegible] 28.23	+1 35.7	
[illegible]		[illegible]	+0 40.30	[illegible]	[illegible]	7 10 12.07	—27 27 12.0	
						+0 40.30	+7 11.3	
[illegible]	[illegible]	[illegible]	+2 09.37	[illegible]	260	7 18 02.17	[illegible]	Very ft.
		[illegible]	[illegible]	07.3		[illegible]	—1 07.6	
[illegible]	[illegible]	[illegible]	+0 27.07	[illegible]	[illegible]	7 36 47.46	[illegible]	Br. planetary.
		[illegible]	[illegible]	[illegible]		+0 27.75	[illegible]	
[illegible]	[illegible]	[illegible]	—0 12.48	[illegible]	264	7 37 40.00	[illegible]	Br.
		[illegible]	[illegible]	00.0		[illegible] 12.52	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	— 1 26.7	[illegible]	7 42 22.56	—27 03 52.8	Pretty br. [illegible]
		[illegible]	58.25	20.4		+0 [illegible]	—1 23.0	N. G. C. [illegible] too great.
[illegible]	[illegible]	[illegible]	[illegible]	— 1 57.0	266	7 53 00.78	[illegible]	Ft.
		[illegible]	51.80	58.7		+0 [illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	+0 50.92	[illegible]	[illegible]	8 [illegible]	—25 03 00.7	Very ft. stellar.
		[illegible]	[illegible]	[illegible]		+0 [illegible]	—8 13.2	N. G. C. δ 2′ too small.
		[illegible]	51.70	[illegible]				
[illegible]	[illegible]	1906.1	—1 23.62	[illegible]	[illegible]	[illegible] 51.81	[illegible]	Very ft.
						[illegible]	[illegible]	
[illegible]		1907.1	[illegible]	[illegible]	[illegible]	[illegible] 37.61	— 4 23 30.8	
						[illegible]	—12 09.3	
[illegible]	[illegible]	[illegible]	[illegible]	— 2 18.0	271	8 28 [illegible]	—15 46 06.2	Ft. [illegible] star on edge of neb.
		[illegible]	10.07	[illegible]		[illegible] 09.63	—2 23.9	
		[illegible]	09.57	27.8				
[illegible]	[illegible]	[illegible]	[illegible] 28.75	[illegible]	[illegible]	8 28 30.98	—22 52 15.0	Pretty br. [illegible]
		[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	

No.	N. G. C. No.	Epoch.	Observed Δα	Observed Δδ	*	Star. Place, and Difference. 1900 α	Star. Place, and Difference. 1900 δ	Description and Notes.
			M. S.	′ ″		H. M. S.	° ′ ″	
275	2612	1906.1	−0 26.75	+ 4 17.4	273	8 29 34.30	−12 54 18.0	Br.
		07.2	27.05	16.6		−0 26.91	+4 16.7	
276	2615	1906.2	−0 37.60	+ 6 32.4	276	8 30 08.47	− 2 18 43.8	Ft.
		07.2	37.85	29.2		−0 37.73	+6 30.5	
276		1907.2	+0 05.22	+10 17.3	272	8 29 24.94	− 2 22 28.6	
						+0 05.20	+10 17.3	
277	2616	1906.2	−0 31.25	−8 32.6	277	8 31 01.32	− 1 21 45.4	Very ft.
		07.2	31.27	31.6		−0 31.20	−8 32.1	Swift's α 6ˢ too great.
		08.2	31.42	31.3				
278	2617	1908.2	+0 52.05	+ 3 53.0	274	8 29 46.00	− 3 48 36.0	Very ft.
						+0 52.04	+3 54.4	
278		1908.2	+0 31.35	− 2 22.2	275	8 30 07.86	− 3 42 21.7	
		09.2	31.20	21.0		+0 31.27	−2 21.3	
279	2642	1907.2	−0 01.97	+ 5 52.6	278	8 35 46.71	− 3 52 03.3	Ft. nebulous star.
		08.2	01.10	55.6		−0 01.55	+5 53.3	N. G. C. α 4ˢ too great.
		09.2	01.52	51.8				
280	2663	1907.2	+0 11.36	−11 25.3	279	8 40 56.85	−33 14 23.6	Ft. lrg.
		07.3	11.85	24.7		+0 11.63	−11 24.9	Swift's α 2ˢ too small, δ 3′ too great.
281	2665	1906.1	−0 14.06	− 8 49.0	280	8 41 42.38	−18 47 25.9	Ft.
		07.1	13.50	51.2		−0 13.76	−8 50.2	
282	2690	1907.2	+2 22.27	+ 8 14.9	281	8 45 13.07	− 2 21 48.4	Pretty ft.
		08.2	21.98	11.4		+2 22.10	+8 14.4	Swift's α 20ˢ too small, δ 1′ too great.
283	2695	1907.2	−0 55.47	+ 4 40.8	283	8 50 20.34	− 2 45 54.7	Pretty br. sm. stellar.
		07.3	55.68	42.6		−0 55.58	+4 41.3	
284	2697	1907.2	−0 23.17	+ 9 28.0	283	8 50 20.34	− 2 45 54.7	Ft.
		07.3	23.35	25.5		−0 23.28	+9 27.0	
285	2698	1906.2	+0 14.12	− 2 13.3	283	8 50 20.34	− 2 45 54.7	Br. sm.
		07.2	14.15	15.0		+0 14.11	−2 13.5	
		07.3	14.07	12.6				
286	2699	1907.2	+0 26.57	+ 1 10.6	283	8 50 20.34	− 2 45 54.7	Br. sm. stellar.
		07.3	26.37	11.0		+0 26.47	+1 11.5	
287	2708	1906.2	+0 46.17	−12 44.5	283	8 50 20.34	− 2 45 54.7	Pretty ft. lrg.
		07.3	46.17	48.8		+0 46.19	−12 46.3	
288	2706	1906.2	+2 01.92	− 5 05.2	282	8 49 07.72	− 2 05 50.8	Very ft. elong.
		07.3	01.72	4 59.2		+2 01.83	−5 01.4	Swift's α 3ˢ too small, δ 1′ too great.
289	2717	1906.1	+0 56.93	+ 3 16.8	284	8 51 41.46	−24 20 40.5	Pretty ft.
		07.3	56.70	20.8		+0 56.82	+3 19.2	
290	Big (2722)	1907.2	+0 41.55	− 7 53.4	286	8 53 03.44	− 3 11 30.8	Very ft.
		08.2	41.88	50.4		+0 41.73	−7 51.5	N. G. C. α 45ˢ too great.
291	2721	1907.1	+0 58.30	− 3 33.1	285	8 52 50.06	− 4 28 19.2	Ft. diffuse.
		08.2	58.35	36.5		+0 58.32	−2 34.3	
292	2763	1907.3	−0 25.85	+ 9 42.1	287	9 02 32.95	−15 15 40.2	Very ft.
		08.2	25.22	43.0		−0 25.56	+9 42.3	

No.	N. G. C. No.	Epoch.	Δα	Δδ	No.	α	δ	Observations and Notes
283	2781	1906.2	+1 02.97	+ 5 04.0	288	9 38 56.26	— 9 31 58.6	Br.
		07.2	03.13	06.3		9 38 56.26	+5 06.0	
		08.2	02.87	05.4				
284	2784	1906.2	—0 03.34	+0 01.20	289	9 08 [illegible]	—13 40 [illegible]	Pretty [illegible]
		07.2	15.01	00.7		[illegible]	[illegible]	
285	2814	1906.2	—1 08.40	+ 0 13.5	290	9 12 38.24	—0 [illegible]	Pretty [illegible]
		07.2	08.57	13.0		—1 08.55	+0 12.9	
286	2815	1906.2	+0 42.44	— 3 [illegible]	290	9 [illegible]	—23 04 38.4	V. [illegible] pretty [illegible]
		09.2	42.58	21.5		[illegible]	—8 [illegible]	
287	2855	1906.2	+1 41.14	+ 4 05.5	292	9 14 57.40	—11 33 [illegible]	Pretty [illegible]
		07.2	41.03	00.6		—1 41.06	+4 06.7	
288	2856	1906.2	+0 16.37	— 3 [illegible]	293	9 18 42.00	—22 34 [illegible]	Pretty [illegible] sm.
		07.2	16.63	37.2		+0 16.52	—9 38.1	
289		1906.2	+0 05.00	— 4 [illegible]	294	9 [illegible]	—22 [illegible]	
		07.2	00.00	33.3		+0 05.05	—4 39.0	
290	2870	1906.3	+0 44.08	+10 16.5	295	9 [illegible]	—16 27 21.9	Ft. sm.
		08.2	43.82	13.5		+0 43.93	+10 15.3	
291	2884	1906.3	+0 17.32	+ 6 04.1	296	9 21 17.24	—11 13 33.8	Ft.
		07.4	16.92	5 56.8		+0 17.11	+6 00.6	
292	2889	1906.3	+1 05.37	+ 0 56.3	296	9 21 17.24	—11 13 33.8	Pretty ft. [illegible]
		07.4	05.02	55.1		+1 05.19	+0 56.1	
302	2902	1907.3	—0 11.55	+ 4 59.4	297	9 20 18.38	—14 22 30.2	Pretty ft. stellar.
		08.2	11.60	52.9		—0 11.57	+4 51.5	
303	2907	1906.3	—0 20.40	+ 4 14.5	298	9 27 14.22	—16 21 57.9	Pretty br.
		08.2	20.62	19.7		—0 20.51	+4 16.9	
304	2917	1907.4	+0 46.92	+ 3 18.1	299	9 28 35.98	— 2 06 53.5	Pretty ft.
		08.2	47.22	17.3		+0 47.06	+3 18.0	
305	2924	1906.3	+0 32.90	— 1 20.3	300	9 29 53.58	—15 55 51.4	Pretty ft.
		08.2	33.38	20.7		+0 33.14	—1 20.4	
306	Nova	1909.2	—1 07.30	—13 20.5	302	9 32 33.05	—11 46 04.4	Ft.
		09.2	07.05	22.6		—1 07.12	—13 22.1	
307	2945	1907.3	+1 05.82	— 7 24.5	301	9 31 02.34	—20 33 24.1	Pretty br.
		08.2	05.80	28.8		+1 05.82	—7 26.2	
308	2974	1906.2	+0 02.41	+ 0 24.8	304	9 37 28.34	— 3 14 58.9	Br.
		07.3	02.50	21.5		+0 02.45	+0 23.1	
309	2979	1906.3	+1 40.57	— 7 48.3	303	9 36 [illegible]	—10 02 51.5	Pretty ft.
		08.2	40.95	20.3		+1 40.74	[illegible]	
310	2981	1906.3	—1 54.97	[illegible]	307	9 38 56.26	— 9 31 58.6	Ft.
						—0 [illegible]	+22 30.7	
310		1906.2	—1 10.45	— 0 07.6	305	9 38 36.80	[illegible]	
						—0 10.44	—9 07.7	
311	Nova (2978)	1906.1	—0 24.12	+13 41.8	307	9 38 56.26	— 9 31 58.6	Ft. [precedes 2980]
		08.2	24.72	41.3		+0 [illegible]	+14 41.3	According to Swift, N. G. C. 2978

N.	N. G. C. No.	Epoch.	Observed Δα	Observed Δδ	N.	Precessions 1908.0 α	Precessions 1908.0 δ	Description and Notes.
			M. S.	″		H. M. S.	° ′ ″	
312	2983	1908.2	+0 10.70	— 6 38.2	306	9 38 51.30	-19 54 27.9	Pretty ft.
		09.2	10.65	46.7		+0 00.00	—0 42.5	
		09.2	----	42.5				
313	2986	1906.3	+0 31.30	— 7 22.5	308	9 39 [illegible]	-20 [illegible] 51.0	Pretty br.
		07.3	31.02	19.9		+0 11.20	—7 21.0	
314	2980	1907.3	—2 40.65	[illegible]	310	9 43 [illegible]	—17 54 39.4	Ft. lrg.
		08.2	40.12	07.1		—2 40.34	[illegible]	
315	2992	1908.2	—0 46.05	+12 16.6	309	9 43 39.52	-14 04 20.9	Pretty ft.
		08.2	45.72	20.0		—0 45.93	+12 21.8	
		09.2	45.50	24.6				
316	2993	1908.2	—0 39.41	+ 9 47.6	309	9 41 39.52	—14 04 20.9	Pretty ft.
		09.2	39.08	48.4		+0 39.43	+9 49.4	
317	3022	1906.3	—0 15.50	— 3 25.2	313	9 44 54.05	— 4 38 34.6	Ft.
		08.2	15.48	29.5		—0 15.49	—3 27.5	
318	3028	1908.2	+1 07.35	+ 7 45.5	311	9 44 04.94	—18 50 50.4	Ft.
		09.2	07.35	46.9		+1 07.32	+7 46.6	
319	3038	1908.2	—0 40.83	+13 32.0	315	9 47 34.02	—32 30 38.0	Pretty br.
		09.2	40.15	33.3		—0 40.51	+13 32.3	
320	3035	1906.3	+2 18.24	+ 1 42.8	312	9 44 37.02	— 0 23 01.3	Pretty ft.
		06.3	18.43	46.0		+2 18.32	+1 45.1	
320		1908.2	+1 28.83	— 8 04.8	314	9 45 27.62	— 6 13 06.9	
		09.2	29.12	07.3		+1 28.98	—8 05.5	
321	3051	1908.2	+0 58.85	+ 2 56.9	316	9 48 29.86	—26 51 53.3	Pretty ft.
		09.2	58.90	57.4		+0 58.84	+2 57.6	
322	3054	1906.3	+0 14.55	+13 52.8	318	9 49 40.76	—25 27 44.0	Pretty br.
		08.2	14.62	48.2		+0 14.55	+13 50.6	N. G. C. a 68 too small.
323	3050	1906.3	+0 28.60	—17 54.2	317	9 49 35.30	—27 31 36.4	Pretty br.
		08.2	28.18	58.9		+0 28.41	—17 56.3	
324	3078	1908.2	+0 57.65	— 4 06.4	320	9 52 54.30	—26 22 52.6	Pretty br.
		09.2	57.92	07.7		+0 57.76	—4 06.6	
324		1908.2	—0 31.98	+ 8 25.5	322	9 54 24.36	—26 35 25.1	
		09.2	31.82	22.1		—0 31.92	+8 23.6	
325	3091	1906.3	+4 29.95	+ 2 47.8	319	9 51 01.17	—10 12 11.6	Pretty ft. pretty lrg.
						+4 29.90	+2 49.0	
325		1906.3	—1 05.90	+ 2 00.5	324	9 56 37.03	-10 11 35.4	
		08.2	05.68	08.8		—1 05.79	+2 08.7	
326	3100	1908.2	+ 2 44.40	+ 7 58.8	321	9 53 31.20	—31 10 00.8	Ft. Precedes a 10 mag. star.
						+2 44.30	+ 7 59.8	
326		1909.2	+ 1 41.25	+ 7 54.7	323	9 54 34.20	—31 18 54.8	
						+1 41.19	+7 55.4	
327	3110	1906.3	+ 0 48.32	+ 0 53.0	325	9 58 13.71	— 6 00 20.7	Ft.
		07.4	48.30	50.4		+0 48.29	+0 52.4	
328	3115	1906.3	—2 09.75	+ 0 15.4	327	10 02 25.12	— 7 14 13.9	Br. lrg.
		08.2	09.68	13.4		—2 09.68	+0 13.5	

	N. G. C.							
328					329	0 58 57.04		
329					330			
				05.1				
			25.02	06.4				
330	3201		−2 31 22		331			Pretty br.
				01.7			−0 03.5	
331	[illegible]		+1 00 28	−11 53.8				Pretty ft.
	13000)		08.25	50.8				Probably N. G. C. 3203, the position of which precedes 1m.
				58.2				
332	3223		−1 25.50	− 7 46.2	333	10 [illegible]	−33 38 03.2	Pretty br.
				40.0				
333			−2 04.25	0 00.0	334		−33 45 50.0	
						−2 04.20	−0 00.7	
334	3242		−1 01.30		335	10 20 58.22		Very br.
							−12 27.1	
335	3271				336		−34 36 43.7	Pretty ft.
			29.28				−12 04.5	N. G. C. α 4s too great, δ 3′ too great.
336			−1 03.08	−14 03.1	337			Ft.
				05.7				
337	3285				338	10 29 09.99		Pretty ft.
			15.82					
338	Nova		+0 11.10	+ 4 42.9	339	10 30 21.04		Ft.
		08.3					+4 46.2	
339	3300				340	10 32 00.78		Br. lrg.
340			−0 38.40		341	10 32 32.10	−26 53 39.8	
			38.25	24.2			−6 23.2	
341	3303				342	10 43 04.71	− 9 26 49.8	Ft.
				57.8			+1 56.3	
342	3293			− 0 06.7	343	10 43 48.04	−24 37 57.5	Ft.
				09.7			−0 08.2	
343					344	10 46 23.21		Ft.
							−1 36.6	
344					345	10 59 47.53	−15 42 36.0	Ft. pretty lrg.
			45.22				−2 27.4	
		08.3		26.0				
345	3351	1908.3	+0 52.05	+ 0 12.6	346		−22 33 03.3	Very ft.
				08.4			+0 10.6	
346	3368	1906.4			347			Ft.

No.	N. G. C. No.	Epoch	Observed − Catalog Δα	Δδ	No.	Star. Place. Δ Difference 1900 α	δ	Description and Notes.
			M. S.	′ ″		H M S	° ′ ″	
345	3537	1908.3	−1 30.64	+ 0 50.0	344	11 03 55.71	— 9 43 46.6	Very ft.
		09.2	30.30	44.1		−0 30.47	+0 46.9	
346	3557	1908.3	−1 18.20	— 7 47.4	346	11 06 31.57	−36 52 05.0	Pretty br.
		09.3	18.38	46.9		−1 18.2	−7 47.5	
347	3571	1906.3	−0 59.90	+ 12 33.1	348	11 07 32.95	−17 57 19.4	Pretty ft.
		08.3	1 00.05	31.0		−0 59.97	+12 32.3	
348	3585	1906.3	+1 19.04	+ 3 09.7	347	11 07 05.38	−26 15 47.8	Br. pretty lrg.
		07.4	19.05	07.8		+1 19.03	+3 09.0	
349	3591	1906.3	+1 13.72	— 9 15.4	349	11 07 40.30	−13 23 17.1	Very ft.
		07.4	13.58	15.1		+1 13.64	−9 14.9	
350	3597	1908.3	−0 05.50	— 4 54.8	350	11 09 52.30	−23 06 10.1	Ft. sm.
		09.3	05.82	52.6		−0 05.45	−4 53.7	
351	3617	1908.3	+0 13.25	+ 3 27.2	353	11 12 43.18	−25 38 42.5	Ft. stellar.
		09.3	12.98	22.1		+0 13.11	+3 24.6	
351		1906.3	+0 48.05	— 0 10.0	352	11 12 08.48	−25 35 07.2	
						+0 48.05	−0 10.8	
352	3621	1908.3	+2 20.05	— 0 54.4	351	11 11 05.38	−32 00 16.5	Pretty ft lrg. diffuse.
		09.3	20.25	56.6		+2 20.09	−6 55.2	
353	3636	1906.0	−0 06.65	+ 0 45.4	354	11 15 28.93	− 9 44 49.9	Ft. sm.
		07.4	06.67	48.8		−0 06.66	+0 47.1	
354	3637	1906.0	+0 07.82	+ 2 14.5	354	11 15 28.93	— 9 44 49.9	Ft. sm.
		07.4	07.70	14.6		+0 07.76	+2 14.6	
355	3661	1908.3	−2 15.08	— 4 53.7	355	11 20 51.06	−13 12 04.8	Ft.
		09.3	15.52	49.1		−2 15.27	−4 51.7	
356	3667	1908.3	−1 36.82	— 6 27.2	355	11 20 51.06	−13 12 04.8	Pretty ft.
		09.3	36.95	26.8		−1 36.86	−6 27.2	
357	3672	1906.3	−1 14.57	+ 5 02.8	356	11 21 13.14	— 0 19 45.4	Pretty br.
		07.3	14.62	4 56.4		−1 14.61	+4 58.9	
358	3693	1908.3	+0 35.65	— 5 23.6	357	11 22 33.52	−12 33 16.0	Pretty ft.
		09.3	35.55	22.8		+0 35.60	−5 23.2	
359	3706	1908.3	−2 37.52	— 4 08.5	363	11 27 28.86	−35 46 14.7	Pretty br.
		09.3	37.75	08.8		−2 37.55	−4 08.9	
360	3707	1908.3	−0 54.52	— 4 45.3	359	11 25 55.85	−10 54 55.8	Very ft.
		09.3	54.45	47.0		−0 54.46	−4 46.2	
361	3715	1906.0	+0 04.42	— 4 53.5	361	11 26 25.54	−13 35 56.0	Pretty ft.
						+0 04.42	−4 53.5	
361		1906.0	−1 00.76	— 2 49.2	364	11 27 30.60	−13 37 59.7	
						−1 00.74	−2 49.1	
361		1907.4	+1 10.80	+13 48.1	358	11 25 18.67	−13 54 31.8	
						+1 10.80	+13 48.5	
362	3717	1906.4	+0 30.45	2 26.0	360	11 26 08.14	−20 42 46.5	Ft. diffuse. A 13th mag. star fol. n.
		08.3	30.30	13.8		+0 30.38	−2 35.8	
		09.3	30.40	37.6				

No.	N.G.C.	Epoch	Δα	Δδ		α	δ	Description
			M S			H M S		
[illegible]	[illegible]	1908.3	+0 10.95	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
		09.3	11 [illegible]	[illegible]		[illegible]	[illegible]	N. G. C. [illegible] too great, δ [illegible] too small
[illegible]	[illegible]	1906.4	[illegible]	[illegible]	[illegible]	11 31 [illegible]	[illegible]	[illegible]
		07.3	[illegible]	41.6		[illegible]	—2 40.9	
[illegible]	[illegible]	1908.3	[illegible]	[illegible]	[illegible]	11 34 [illegible]	[illegible]	Pretty [illegible]
		09.3	[illegible]	[illegible]		[illegible]	[illegible]	
[illegible]	[illegible]	1908.3	[illegible]	[illegible]	366	11 [illegible]	[illegible]	[illegible]
		09.3	04.60	[illegible]		[illegible] 04.34	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
		09.3	[illegible]	54.7		[illegible] 02.25	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
		08.3	50.70	30.4		[illegible] 50.85	[illegible]	
[illegible]		[illegible]	[illegible]	— [illegible]	368	11 36 40.04	[illegible]	
						[illegible]	[illegible]	
[illegible]	[illegible]	1908.3	— [illegible]	[illegible]	[illegible]	[illegible]	[illegible]	Very [illegible]
		[illegible]	[illegible]	02.1		[illegible]	+9 03.[illegible]	
[illegible]	[illegible]	[illegible]	+0 03.60	[illegible]	[illegible]	11 [illegible] 10.04	[illegible]	Ft.
		[illegible]	[illegible]	[illegible]		[illegible]	—5 58.8	
[illegible]	[illegible]	[illegible]	[illegible]	— 2 16.8	[illegible]	[illegible]	[illegible]	Ft.
		[illegible]	18.28	17.6		[illegible] 18.32	[illegible]	
[illegible]	3865	[illegible]	[illegible]	[illegible]	[illegible]	11 [illegible]	— 8 36 05.2	Ft. lrg.
		[illegible]	[illegible]	[illegible]		+0 08.06	[illegible]	N. G. C. α 20ˢ too great, δ 1′ too small
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	11 41 [illegible]	—27 24 29.4	Ft.
		[illegible]	[illegible]	[illegible]		[illegible]	+2 29.5	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	11 [illegible] 59.28	[illegible]	Pretty br.
		[illegible]	[illegible]	[illegible]		-1 59.22	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	11 41 [illegible]	—10 23 36.0	Pretty br.
		07.[illegible]	[illegible]	48.8		[illegible] 02.00	—0 48.1	
[illegible]		[illegible]	—0 48.97	+ 3 58.0	[illegible]	[illegible]	-10 28 28.0	
		[illegible]	[illegible]	4 02.0		[illegible]	+4 00.0	
[illegible]	[illegible]	[illegible]	—1 04.52	8 58.1	[illegible]	11 45 [illegible]	[illegible]	Pretty br.
		[illegible]	04.78	[illegible]		—1 04.62	[illegible]	[illegible]
377	[illegible]	1907.4	+0 42.77	+[illegible]	[illegible]	11 45 [illegible]	[illegible]	Br.
						[illegible]	[illegible]	
[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
		[illegible]	[illegible]	[illegible]		—1 20.49	+5 12.0	
[illegible]	[illegible]	1908.3	+0 13.20	[illegible]	[illegible]	11 48 20.54	— 3 19 38.6	Ft.
		[illegible]	[illegible]	45.6		+0 13.25	—6 48.5	
[illegible]	3955	1908.3	[illegible]	— 3 58.3	382	11 49 03.84	[illegible]	Pretty [illegible]
		09.3	11.82	[illegible]		[illegible] 11.71	[illegible]	N. G. C. [illegible] too great, δ 1′ too great
[illegible]	[illegible]	1906.4	[illegible]	+ 8 06.5	[illegible]	11 [illegible] 53.32	[illegible]	Pretty br.
		07.4	19.48	[illegible]		—3 19.27	+8 08.2	
[illegible]	3967	1908.3	[illegible]	[illegible]	379	11 46 04.38	— 7 26 05.3	Very ft.
		[illegible]	[illegible]	[illegible]		+3 [illegible]	[illegible]	

No.	N. G. C. No.	Epoch.	Observed $\Delta\alpha$	Observed $\Delta\delta$	Star	Place 1900.0 α	Place 1900.0 δ	Description and Notes.
			M. S.	′ ″		H M S	° ′ ″	
382	3979	1907.4	−0 40.68	+ 3 24.1	383	11 51 34.44	− 2 13 15.5	Pretty ft.
		08.3	40.50	22.0		−0 40.59	+3 23.0	Swift's α 7^s too great. δ 1′ too great.
383	4006	1908.3	−1 28.10	−12 08.8	388	11 54 27.08	− 1 21 39.7	Ft.
		09.3	27.92	10.5		−1 28.01	−12 09.6	
384	Nova (4024)	1908.3	+1 23.42	+ 2 07.1	384	11 52 01.63	−17 40 34.7	Pretty br.
		09.3	23.37	08.4		+1 23.38	+2 07.7	N. G. C. α 33^s too great, δ 1′ too great.
385	4027	1908.3	+1 23.60	− 4 09.0	386	11 53 00.18	−18 38 26.6	Pretty ft. lrg. diffuse.
		09.3	23.70	09.2		+1 23.03	−4 09.4	
386	4030	1908.3	−0 00.40	−24 31.7	390	11 55 17.31	− 6 08 06.2	Pretty br.
		09.3	00.23	33.5		−0 00.32	−24 32.6	
387	4033	1906.4	+1 48.42	− 5 00.0	387	11 53 39.56	−17 12 10.3	Pretty br.
		07.4	48.68	4 56.7		+1 48.53	−4 58.8	
387		1906.4	+0 28.18	+ 9 30.2	389	11 54 59.66	−17 26 38.6	
		07.4	28.12	30.3		+0 28.15	+9 30.3	
388	4038	1906.4	+0 12.40	− 4 30.4	391	11 56 34.59	−18 14 07.3	Pretty br. lrg.
		08.3	12.04	27.4		+0 12.22	−4 28.9	
389	4070	1908.3	+0 03.33	− 4 09.5	392	11 59 39.73	− 1 45 19.5	Ft. lrg.
		09.3	03.58	12.9		+0 03.45	−4 11.2	
390	4087	1908.3	+0 11.40	+ 9 37.4	393	12 00 16.08	−26 07 30.0	Pretty ft.
		09.3	11.50	36.2		+0 11.45	+9 36.8	
391	4105	1908.3	+1 05.17	+15 17.0	394	12 00 27.29	−29 27 30.7	Pretty br.
		09.3	05.22	15.7		+1 05.17	+15 16.3	
392	4106	1908.3	+1 09.80	+14 47.4	394	12 00 27.29	−29 27 30.7	Pretty br. A little fainter than 391.
		09.3	10.02	44.9		+1 09.88	+14 46.2	
393	4129	1908.3	−0 52.85	−12 59.8	395	12 04 38.62	− 8 15 51.4	Ft. lrg.
		09.3	53.16	55.6		−0 53.00	−12 57.7	
394	4240	1907.4	+0 47.30	+ 6 05.8	396	12 11 28.27	− 9 20 51.4	Ft. sm. A 11th mag. star. pr. s.
		08.3	47.58	04.4		+0 47.44	+6 05.1	
395	4263	1908.3	+0 13.20	+ 8 02.3	397	12 14 10.94	−11 48 17.5	Ft.
		09.3	13.39	05.5		+0 13.30	+8 03.9	N. G. C. α 3^s too small, δ 2′ too great.
396	4329	1908.3	−1 10.82	−16 36.2	398	12 19 21.06	−11 43 40.0	Ft. sm. stellar.
		09.3	10.87	37.0		−1 10.84	−16 36.5	
397	4348	1906.3	−0 37.00	+ 3 27.3	399	12 19 23.35	− 2 56 41.6	Very ft. elong.
		07.4	37.12	21.5		−0 37.21	+3 24.7	
		08.3	37.52	25.3				
398	4361	1907.4	−0 19.50	−11 59.0	400	12 19 39.92	18 01 51.4	Br.
		08.3	19.62	58.2		−0 19.55	−11 58.6	
399	4403	1908.3	−0 36.12	+ 2 28.6	401	12 21 39.81	− 7 10 18.0	Ft. sm.
		09.3	36.48	21.8		−0 36.30	+2 25.2	N. G. C. α 3^s too great.
400	4404	1908.3	−0 32.88	+ 2 37.8	401	12 21 39.81	− 7 10 18.0	Ft. sm.
		09.3	32.87	40.3		−0 32.87	+2 39.0	
401	4422	1907.4	+0 13.90	+13 50.7	402	12 21 40.80	5 30 30.1	Ft.
		08.3	13.82	55.3		+0 13.86	+13 53.0	

		1908.3						Ft.
			08.3				+6 47.4	
		1908.3					— 7 43 39.0	Pretty ft.
			08.3					
404	4454	1908.3			406			Ft.
				06.3			28.25	
405	4464	1908.3	+0 16.42		407		—22 40 35.2	Pretty br.
			08.3	44.0			+3 46.4	
406		1908.3			408	12 34 54.13		
						+0		
407	4487	1908.3			409			Ft. lrg.
			22.06					N. G. C. α 1^s too small, δ 1' too great
407	4549	1908.3	+0 16.40		408			Pretty br.
			16.4			16.46	—4 24.9	
408		1908.3	— 18.40	+10 00.2	410	12 34 28.00		Cluster, lrg.
			18.3	07.0		18.28	+10 03.6	
409	4503	1906.4	+0 57.35		411	12 33		Pretty br. sm. stellar.
		07.4	57.32	10.6		+0 57.47		
410	4594	1907.4	—1 06.35		412			Very br. lrg. elong.
		08.3	06.40	18.8		—1 06.38	—2 18.4	
411	4604	1908.3	—1 22.87		413	12 30		Br. lrg.
		07.4	22.15	10.6		—1 22.55	+5 12.5	N. G. C. α 8^s too great, δ 1' too great.
		08.3	22.67	08.9				
412	4628	1907.4	+1 19.22		414	12 34 56.07		Pretty ft.
		08.3	19.20	17.8		+2 19.20	+5 19.0	
413	4658	1908.3			415	12 39 16.30		Very ft.
			09.76			+0 09.74		
414	4663	1908.3	+0 19.08		416	12 39 16.30		Ft. sm.
			19.18	6 58.8		+0 19.12	—7 00.4	N. G. C. α 1^s too great, δ 2' too small.
415	4666	1908.3	+2 02.67		417	12 37 58.73		Very br. elong.
						+2 02.67		
416		1908.3	—1 31.72		418	12 41 32.70	— 0 06 59.0	
						—1 31.71		
417	4671	1907.4	+0 30.20	— 6 58.8	419	12 39 58.31	— 6 24 25.2	Pretty ft.
		08.3	30.25	57.8		+0 30.21	—6 58.4	
418	4674	1906.4	+2 37.00		420	12 39	— 2 09 37.6	Ft.
		07.4	37.27	18.6		+2 37.14		
419	4690	1908.3	—1 02.05	— 9 06.6	421	12 43		Very ft.
				04.9		—1 01.95	—9 05.7	N. G. C. α 2^s too great, δ 1' too great.
420	4691	1907.4	+0 32.50	— 4 07.4	422	12 40	— 2 43 05.8	Pretty br.
		08.3	32.48	07.3		+0 32.51		N. G. C. α 2^s too small.
421	4697	1907.4	—0 38.85		423	12 44 04.97		Very br.
		08.3	38.78	04.3		—0 38.80		

No.	N. G. C. No.	Epoch	Observed $\Delta\alpha$	Observed $\Delta\delta$	*	Star Place and Difference. α	Star Place and Difference. δ	Description and Notes.
			M. S.	′ ″		H M S	° ′ ″	
421	4699	1907.4	+3 33.15	+ 1 03.9	418	12 40 18.05	— 8 08 11.5	Pretty br.
		08.3	33.10	01.4		+3 33.10	+1 02.2	
422	4700	1906.4	−2 00.58	— 8 32.4	426	12 45 56.35	−10 43 22.5	Ft.
		07.4	00.97	33.0		−2 00.77	−8 32.5	
423	4714	1908.8	−1 07.35	+ 9 32.4	429	12 46 13.11	−12 56 17.5	Ft.
		09.3	07.35	31.5		−1 07.50	+9 29.0	
424	4716	1908.3	+1 32.55	−14 01.2	422	12 43 48.97	— 8 40 26.1	Pretty ft.
		09.3	32.55	13 54.5		+1 32.53	−13 58.0	
425	4717	1908.3	+1 34.52	−14 42.4	422	12 43 48.97	— 8 40 26.1	Ft.
		09.3	33.90	42.5		+1 34.10	−14 42.7	
426	4724	1907.4	+2 16.65	+ 4 58.4	421	12 43 22.95	−13 52 14.3	Very ft. sm.
		08.3	16.43	59.6		+2 16.53	+4 58.7	
427	4727	1907.4	+2 20.52	+ 4 54.6	421	12 43 22.95	−13 52 14.3	Pretty ft. Larger than 426.
		08.3	20.40	59.6		+2 20.45	+4 56.8	
428	Nova	1908.3	+0 05.30	+ 9 11.3	429	12 46 13.11	−12 56 17.5	Ft.
		09.3	05.85	11.8		+0 05.40	+9 08.4	
429	4739	1907.4	−0 26.85	+ 6 47.0	430	12 46 52.51	— 7 58 46.1	Very ft.
		08.3	26.60	52.8		−0 26.71	+6 50.0	
430	4742	1906.4	+0 25.23	— 6 59.1	427	12 46 10.66	— 9 47 37.8	Br. sm.
		08.3	25.23	7 00.3		+0 25.24	−6 59.7	
431	4753	1907.4	+0 10.42	−16 16.6	431	12 47 04.54	— 0 23 05.4	Pretty br.
		08.4	10.17	17.8		+0 10.29	−16 17.2	
432	4756	1908.4	+1 25.06	— 4 35.7	428	12 46 12.37	−14 47 38.0	Ft.
		09.3	25.42	36.1		+1 25.50	−4 36.1	N. G. C. α 3^s too great.
433	4757	1908.4	+1 27.27	+ 1 38.0	427	12 46 10.66	— 9 47 37.8	Ft.
		09.3	27.30	37.7		+1 27.27	+1 37.6	N. G. C. α 2^s too great, δ 2′ too great.
434	4759	1908.4	+0 00.46	+ 1 39.8	433	12 47 52.57	— 8 41 03.5	Pretty ft.
		09.3	00.00	38.8		+0 00.23	+1 39.3	
435	4761	1908.4	+0 01.48	+ 1 25.9	433	12 47 52.57	— 8 41 03.5	Ft.
		09.3	01.60	22.0		+0 01.54	+1 24.0	
436	4760	1906.4	−1 44.01	— 3 33.8	430	12 49 38.71	— 9 53 31.0	Pretty br.
						−1 44.01	−3 33.6	
436		1908.3	+1 44.25	— 9 23.0	427	12 46 10.66	— 9 47 37.8	
						+1 44.26	−9 24.1	
437	4770	1908.4	−0 09.45	+ 4 38.6	434	12 48 29.53	— 9 04 32.1	Ft.
		09.3	09.40	35.2		−0 09.42	+4 36.9	N. G. C. α 2^s too small, δ 1′ too small.
438	4773	1908.3	+1 31.86	— 7 00.8	430	12 46 52.51	— 7 58 46.1	Ft.
		09.3	32.42	6 59.6		+1 32.09	−7 00.4	N. G. C. α 1^s too great, δ 2′ too great.
439	4775	1907.4	+3 04.87	— 9 40.1	425	12 45 30.78	— 5 54 56.7	Ft.
		08.3	04.55	32.9		+3 04.69	−0 51.4	
440	4781	1906.4	−0 27.26	+ 6 08.6	436	12 49 38.71	— 9 53 31.0	Pretty br. diffuse.
		08.1	27.75	08.6		−0 27.50	−6 09.1	
441	4786	1906.4	+1 34.72	+15 56.3	432	12 47 46.90	— 6 34 56.4	Pretty br.
						+1 34.72	+15 56.1	N. G. C. α 3^s too great.

No.	B.D. or N.P.M.	Epoch	Observed $\Delta\alpha$	Observed $\Delta\delta$	No.	Mean Place 1900 α	Mean Place 1900 δ	Remarks and Notes
			M. S.	″		h m s	° ′ ″	
441		1907.4			435	12 48 47.35		
		08.4						
442	4784	1907.4		+ 9 02.9	436			
		08.4						
443	4785	1907.4			437			
		08.4						
444	4818	1907.4			438			
		08.4						
445	4845	1908.4			438			
		08.4		07.8				
446	4850	1908.4			440			Pretty ft.
		08.4				—0 07.53		
447	4850	1907.4			441			Pretty br.
		08.4		26.7				
448	4860	1907.4			442	12 54 38.68		Ft.
		08.4		27.4			—10 29.6	
449	4867	1908.4			448	12 58 21.22		Very ft.
		08.4		11.7				
450	4889	1908.4		— 3 02.6	443	12 55 09.61		Very ft.
		08.4		06.4				
451	4909	1907.4			444	12 55 35.46		Pretty br.
		08.4						
452		1907.4			445	12 55 38.77		
		08.4		44.6			—0 44.4	
453	4915	1907.4			442	12 54 35.65		Br.
		08.4		09.6				
454	4928	1908.4			447	12 57 52.00		Ft. br.
		09.4						
455	4933	1907.4			449	12 58 22.86		Pretty br.
		08.4		01.7				
455	4939	1907.4			452	13 00 27.88		Pretty ft.
		08.4						
456	4941	1908.4			446	12 57 48.21		Pretty ft.
		08.4						
457	4951	1908.4			450	12 59 01.50		Ft.
		07.4		00.5				
		08.4		05.1				
458	4958	1907.4			451	13 00 09.31		Very br.
		07.4						
458		1907.4			454	13 01 46.11		
		07.4						
459	4981	1906.4			455			Br. 9.5 mag. star fol. s.
		07.4						

No.	N. G. C. No.	Epoch.	Observed			Star Place and Difference		Description and Notes.
			Δ α	Δ δ		α	δ	
			M. S.	′ ″		H. M. S.	° ′ ″	
460	4984	1907.4	+0 25.60	— 11 26.4	454	13 03 14.15	—14 47 33.1	Br. sm.
		08.4	25.87	24.0		+0 25.72	—11 25.2	
461	4989	1908.4	—0 40.62	+ 8 33.8	458	13 04 40.24	— 5 00 18.7	Pretty ft.
		09.4	40.85	30.4		—0 40.87	+8 32.2	
462	4995	1906.4	+0 04.44	— 3 07.2	456	13 04 23.89	— 7 14 52.5	Pretty br.
		08.4	04.45	09.8		+0 04.45	—3 08.5	
463	4997	1906.4	+0 09.44	0 00.0	457	13 04 24.03	—15 58 55.6	Ft.
		08.4	09.42	00.0		+0 09.43	0 00.0	
464	5018	1906.4	+0 18.52	— 4 23.7	459	13 07 21.41	—18 54 51.3	Pretty br.
		08.4	18.55	22.3		+0 18.53	—4 23.0	
465	5038	1908.4	—0 24.82	+10 26.3	461	13 10 07.71	—15 35 47.8	Pretty br.
		09.4	24.72	26.3		—0 24.75	+10 26.4	
466	5044	1907.4	—0 24.27	— 6 30.0	462	13 10 29.05	—15 44 46.1	Pretty br.
						—0 24.27	—6 38.9	
466		1908.4	+1 15.50	+10 10.0	460	13 08 49.16	—16 01 20.7	
						+1 15.52	+10 09.7	
467	5048	1908.4	—2 14.75	— 4 44.4	464	13 12 53.68	—27 48 10.5	Very ft.
		09.4	14.90	48.2		—2 14.77	—4 45.8	
468	5061	1906.4	—0 10.20	+ 0 15.6	463	13 12 46.73	—26 18 52.7	Very br.
		07.4	10.46	18.9		—0 10.33	+0 17.2	
469	5077	1906.4	—2 35.57	— 4 34.6	471	13 16 50.01	—12 03 19.9	Pretty br.
						—2 35.55	—4 34.2	
469		1907.5	+0 32.60	— 0 34.1	465	13 13 42.89	—12 07 17.4	
						+0 32.60	—0 34.2	
470	5078	1906.4	—0 39.52	0 00.0	468	13 15 00.01	—26 53 03.0	Pretty br.
		08.4	39.35	— 0 04.6		—0 39.44	—0 02.2	
471	5084	1906.4	—0 48.88	— 1 15.8	470	13 15 40.97	—21 16 54.1	Pretty ft.
		07.4	49.30	15.4		—0 49.09	—1 15.4	
472	5087	1908.4	+0 31.47	— 2 46.3	466	13 14 30.01	—20 02 23.0	Pretty ft.
		09.4	31.58	48.4		+0 31.51	—2 47.5	N. G. C. α 3ˢ too great.
473	5101	1906.4	+1 15.88	— 1 19.9	468	13 15 00.01	—26 53 03.0	Pretty br.
		08.4	15.82	19.2		+1 15.83	—1 19.8	
473		1906.4	+0 46.28	+ 0 28.2	469	13 15 29.68	—26 54 48.6	
						+0 46.28	+0 28.1	
474	5102	1908.4	+1 18.70	+ 4 43.8	467	13 14 58.37	—36 11 05.5	Pretty br.
		09.4	19.13	45.6		+1 18.64	+4 43.6	N. G. C. α 4ˢ too great.
475	5111	1908.4	+0 11.08	+ 13 19.7	472	13 17 27.94	—12 39 48.8	Pretty ft.
		09.4	11.30	19.3		+0 11.21	+13 19.5	
476	5119	1906.4	+1 52.28	+18 07.1	471	13 16 50.01	—12 03 19.9	Pretty br.
		08.4	51.96	10.0		+1 52.09	+18 08.2	
477	5122	1906.5	+1 13.77	+ 2 32.7	473	13 17 45.73	—10 10 29.8	Ft.
		08.4	13.[illegible]	38.7		+1 13.66	+2 35.4	Swift's α 3ˢ too great, δ 1′ too small.

			M. S.			H. M.			
		1908.4			475				
		08.4							
		1908.4			476				
				24.1		—2			
			15.50	24.1					
		1908.4			474		—11 57 53.9		Very ft.
				41.6		+0 50.12	+0 42.8		
		1908.4			477				
		09.4	35.35						
		1908.4	—0 48.87						
		09.4	48.85						
		1908.4				13 26	—32 44 03.2		Pretty br.
		09.4		53.1			+0 53.6		
		1908.4			479	13 25	— 8 15 28.0		
				47.5		+1 27.48	—0 47.5		
		1906.4			481	13 29 26.10	— 0 29 14.6		Pretty br.
		07.4				+1	—2 04.4		
			+0 08.35		482		— 8 04 00.7		Ft.
			08.82	55.4		+0 08.58			N. G. C. a 3s too great, δ 1' too small.
		1906.4			483		—29 19 48.4		Very br.
		07.5		36.0		+1 22.27			
		1908.4	—0 21.74		484				
		09.4		42.9					
		1906.4		— 6 40.1	485				Br.
		07.4		37.8		—2 31.73	—6 18.6		
		1908.4			480		—30 56 25.3		
						—3	—11 37.0		
		1908.4			487		— 6 48 56.3		Ft.
		09.4	01.68			—2 01.76	+5 21.0		
		1908.4			489		— 5 41 35.2		Pretty ft. diffuse.
		09.4		50.1					N. G. C. a 3s too small.
		1906.4	—1 23.87		490	13 48 36.88			Pretty br.
		07.4	23.90	40.2		—1 23.95	+4 42.9		
		1908.4	12.55		488	13 47 44.19			Very ft.
		09.4	12.56	29.6		+1	+8 28.4		
		1906.4	—0 27.95	+ 3 55.1	491		— 1 00 40.0		Ft.
		07.4	28.07			—2 28.05			
		1908.4			492	13 [illegible] 26.33			Ft. sm. stellar.
		09.4	01.62	48.4		—1	+0 47.2		N. G. C. a 1s too great, δ 1' too great.
		1908.5		—12 18.0	493				Very ft.
		09.4				—2 57.26			N. G. C. a 3s too small.
		1906.4	—2 54.97		494	14 00 05.65			Pretty ft.
		07.4		06.7					

No.	N. G. C. No.	Epoch.	Observed			Description and Notes.
			$\Delta\alpha$	$\Delta\delta$		
			M. S.	′ ″		
497	5427	1906.4	−2 53.07	+ 4 28.3	495	Pretty ft.
		07.4	53.03	34.0		
497		1908.5	−1 [illegible]	−12 [illegible]	494	
498	5403	1906.4	−0 55.52	+ 7 10.6	497	Br. sm. stellar.
		07.4	55.60	07.5		
499	5496	1906.4	+0 18.70	− 1 29.6	496	Pretty br. lrg. elong.
		08.5	18.72	25.8		N. G. C. α 3^s too small.
500	5506	1906.4	+0 28.53	− 6 11.8	498	Ft. diffuse.
		07.4	27.30	13.2		
		08.5	28.66	14.9		
501	5507	1906.4	+0 33.73	+ 9 43.1	498	Ft. sm.
		07.4	33.85	43.2		
502	5534	1906.4	−0 18.43	+ 7 05.7	499	Pretty ft.
		07.4	18.52	08.8		
503	5595	1906.5	+2 47.60	+15 36.1	500	Ft.
		07.5	47.58	36.1		
504	5604	1906.5	+2 05.35	− 1 54.0	501	Ft.
		07.4	04.55	57.0		
		08.5	04.87	56.6		
505	5634	1906.4	−0 04.80	+ 0 24.0	502	Very br.
		07.5	04.77	24.4		
506	5661	1906.5	+0 29.73	− 5 18.3	503	Pretty br.
		07.5	29.22	20.2		
507	5664	1906.4	−0 03.82	+10 57.3	504	Pretty br.
		07.5	04.25	11 05.1		
507		1906.4	−1 19.55	− 6 29.1	505	
		07.5	19.52	27.5		
508	5720	1906.4	−2 58.29	− 4 29.2	510	Ft. diffuse.
508		1907.4	−1 15.34	+ 7 12.6	508	
509	5728	1906.5	+0 35.45	+ 1 30.4	506	Pretty ft.
		07.5	35.38	30.9		
509		1906.5	+0 00.82	+ 3 41.2	507	
		07.5	00.62	32.6		
510	Nova	1906.4	+1 19.53	−11 38.8	509	Ft. sm.
	(1574?)	07.5	18.90	37.4		N. G. C. α 42^s too small, δ 1′ too great.
		09.4	19.45	43.7		
511	5756	1906.4	+1 42.63	+ 8 04.4	511	Pretty br.
		07.5	43.15	07.0		
512	5757	1908.4	−1 55.05	− 8 03.3	512	Ft.
		09.4	54.85	03.0		

	No.	Epoch	M. S.				Comparison Stars
		1005.5					Pretty ft.
		07.5					
		09.4	59.50				
	5702	1008.5					
		07.5	33.52	29.1		—8 28.2	
		1008.5		—10 33.1		—10 02 53.6	
		09.4					
	5803	1008.5	+0	— 1 53.6		14 54 58.08	Very ft.
		09.4	24.04			+0 23.80	
		09.4	24.02	47.3			
		1008.5		+ 7 00.3			Pretty br.
		09.4				—1 12.56	
		1008.5					Very br.
		09.4					
	Big.	1008.5		+ 3 43.8			Ft.
						—0 28.04	Bigourdan 187.
		1008.5	—1 44.57		522		
							+7 23.7
		1008.5		— 0 15.0		15 03 15.80	Ft. sm. stellar.
						+0 07.32	
		1008.5				15 04 32.05	—10 52 55.4
							+3 21.0
	5861	1006.4	—0 42.00	— 3 35.8			Ft. lrg.
		09.5		37.1		—0 41.71	—3 36.2 N. G. C. a 3s too small.
	Big.	1005.5		— 2 04.6			—18 00 59.6 Ft.
		07.5	18.00	06.3			—2 06.0 too small.
		1005.5				15 05 53.79	—11 05 32.9 Ft.
		07.5	24.08	29.4		—0 24.85	—0 30.3
				— 3 38.5			—13 50 07.6 Pretty br.
				36.8		—0 32.04	—3 37.4
							Ft.
		07.5					
						15 09 56.06	—11 04 32.1 Very ft.
		08.5		55.1		+0 49.37	—2 56.7 too small.
	5898		+1 25.40	— 5 28.0			—23 38 26.5 Ft.
		09.5		27.6		+1 25.42	—5 28.3 too small.
		1005.5	+1 48.07			15 10 56.66	—23 38 26.5 Pretty ft.
		06.5		44.1		+1 48.32	N. G. C. δ 2′ too small.
		09.4	48.32	44.0			
			—1 08.49	+ 0 26.0			— 2 13 28.6 Very ft.
		07.5	08.42			—1 08.45	+0 28.6
				+ 5 49.3			—12 49 43.8 Br.

No.	N. G. C. No.	Epoch.	Observed $\Delta\alpha$	Observed $\Delta\delta$	No.	Place (1900.0) α	Place (1900.0) δ	Description and Notes.
			M. S.	′ ″		H. M. S.	° ′ ″	
531	5916	1905.5	+1 28.29	+ 1 09.0	532	15 14 38.64	—12 49 43.8	Very ft.
		06.5	28.43	12.3		−1 28.36	+1 10.6	
532	5937	1905.5	— 4 58.89	— 4 09.7	533	15 17 06.47	— 6 56 53.0	Very ft.
		07.5	54.10	11.2		−0 53.—	−4 10.2	
533	5937	1905.5	+0 57.—	0 22.1	531	15 24 30.7—	— 2 28 51.3	Pretty br.
		06.5	57.68	21.0		+0 57.67	−0 22.0	
534	5954	1905.5	−0 46.58	3 22.5	533	15 32 29.64	—16 12 35.2	Very ft.
		07.5	46.25	27.4		−0 46.41	−3 24.7	N. G. C. α 8^s too small, δ 1′ too small.
534		1905.5	−0 37.27	+ 8 07.3	532	15 32 00.47	—16 24 04.9	
						−0 17.26	+8 07.5	
535	5995	1905.5	+0 03.33	— 0 21.8	534	15 42 47.66	—13 26 32.7	Very ft.
		07.5	−0.30	27.3		+0 03.35	−0 24.5	
536	6000	1905.5	−0 33.36	+ 1 30.5	535	15 44 13.39	—29 06 31.0	Very ft.
		07.5	33.40	38.9		−0 33.48	+1 38.0	
537	6012	1906.5	+0 0—.—	— 7 25.3	536	16 06 23.96	—35 50 52.2	Pretty ft.
		07.5	−1.38	27.4		+0 01.09	−7 26.4	N. G. C. α 3^s too small, δ 1′ too great.
538	6003	1905.6	−0 12.33	— 3 12.1	537	16 11 16.95	—22 40 25.5	Very br.
		06.5	−0.32	15.1		−0 12.12	−3 13.0	
539	6071	1906.5	+1 41.35	+ 4 28.9	538	16 25 14.30	—12 54 57.0	Br. lrg.
		07.5	41.18	32.3		+1 41.27	+4 30.5	
544	6220	1906.5	2 07.47	11 38.9	539	16 44 13.44	+ 0 05 51.3	Ft.
		07.5	07.48	41.8		−2 07.42	−11 35.6	Swift's α 5^s too great, δ 1′ too small.
		09.4	07.43	34.2				
541	6235	1905.6	+2 31.81	+ 1 22.1	540	16 44 54.10	—22 01 59.6	Pretty br.
		06.5	32.05	22.3		+2 31.62	+1 21.6	
542	6266	1906.6	+2 36.96	+ 0 01.3	541	16 52 14.32	—29 57 54.3	Very br.
		07.5	37.25	06.3		+2 37.01	+0 02.4	
542		1906.6	2 15.79	1 45.3	543	16 57 07.06	—29 59 38.4	
		07.5	15.85	39.6		−2 15.80	+1 43.7	
544	6273	1905.6	+2 57.39	+ 0 10.2	546	16 58 24.29	—26 07 34.2	Very br.
		06.5	56.73	04.4		−1 57.47	−0 08.2	
543		1906.6	+2 40.45	+ 3 45.7	542	16 55 55.59	—26 11 04.7	
		07.5	31.50	39.8		+0 31.42	+3 42.5	
544	6284	1906.6	+2 35.20	+ 4 43.6	545	16 57 39.78	—24 42 12.2	Br.
		06.5	35.43	35.4		+0 35.33	+4 42.5	
545	6287	1905.6	+1 28.63	2 09.5	544	16 57 39.60	—22 31 59.1	Br.
		06.5	28.57	58.6		+1 28.58	2 11.4	
539	6293	1906.6	+1 16.—	1 11.2	547	17 00 1—.80	—26 22 39.1	Br.
						+3 16.87	−4 42.8	
546		1906.6	−0 31.26	—7 49.1	548	17 04 40.06	—26 10 32.0	
		06.5	41.82	48.0		−0 41.84	−7 48.3	
540		1906.6	−1 26.25	1 —.—	549	17 05 1—.—	—26 34 40.0	
						−1 26.2—	+7 24.4	

No.		Epoch.	Measured					Descriptive Notes.
			Δα	Δδ		α	δ	
			M. S.			H. M. S.		
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	551	[illegible] 42.05	[illegible]	[illegible]
		[illegible]	17.20	[illegible]		[illegible]	[illegible] 18.2	
[illegible]	[illegible]	[illegible]	[illegible]	+ [illegible]	550	7 05 [illegible]	[illegible]	Br. [illegible]
		06.5	[illegible]	10.0		[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible] 57.9	[illegible]	[illegible]	[illegible]	[illegible]
		[illegible]	50.08	[illegible] 02.3		[illegible]	—17 00.5	
[illegible]	6310	1906.5	[illegible]	—10 25.6	553	[illegible]	27 51 14.3	Br.
		[illegible]	[illegible]	20.7		[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	+[illegible] 16.8	554	[illegible]	—23 57 45.0	Pretty br.
		[illegible]	06.32	[illegible]		[illegible]	[illegible]	N. G. C. [illegible] too great.
[illegible]	[illegible]	1906.5	[illegible]	+[illegible]	[illegible]	[illegible] 23.80	[illegible] 14.7	Br. cluster.
		[illegible]	[illegible]	33.1		[illegible] 02.08	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible] 40.0	Pretty br.
		[illegible]	[illegible]	[illegible]		+0 34.68	[illegible] 32.4	
[illegible]	[illegible]	[illegible]	[illegible]	+ [illegible] 24.5	557	[illegible]	[illegible] 30.1	Very br. lrg.
		[illegible]	[illegible]	28.7		[illegible] 09.84	+9 26.6	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	26 07 43.2	Br. lrg.
		[illegible]	04.55	49.6		[illegible] 04.39	[illegible] 49.8	
[illegible]	[illegible]	[illegible]	[illegible]	—[illegible] 00.0	559	[illegible]	23 21 29.1	Very br.
		[illegible]	[illegible]	06.2		+0 28.18	—19 08.0	
[illegible]	[illegible]	[illegible]	[illegible]	14 00.0	560	[illegible] 11.23	[illegible] 09.8	Br. very lrg.
		[illegible]	[illegible]	13 51.0		+0 10.45	—13 [illegible]	
		[illegible]	——	57.7				
[illegible]	[illegible]	[illegible]	[illegible]	+ 7 48.7	[illegible]	[illegible] 30.41	[illegible] 59.2	Pretty br. Star involved [illegible] side.
		[illegible]	08.97	54.6		[illegible] 08.53	+7 51.6	
[illegible]	6440	1906.5	[illegible]	+ 5 00.7	[illegible]	17 45 58.38	[illegible] 36.8	Pretty br.
		[illegible]	[illegible]	[illegible] 56.0		[illegible] 02.03	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	— 0 09.7	563	17 43 39.08	[illegible]	Pretty br.
		[illegible]	20.17	12.6		[illegible] 20.28	[illegible] 11.0	
[illegible]	[illegible]	[illegible]	+0 22.20	— [illegible]	562	17 43 02.07	[illegible] 40.7	Br.
		[illegible]	21.68	28.2		+0 21.04	[illegible] 27.7	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	17 44 46.41	34 31 50.5	Pretty br.
		09.4	33.94	20.4		[illegible] 33.94	[illegible] 20.5	N. G. C. α 28s too great, δ 2′ too great.
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible] 25.11	[illegible] 16.0	Pretty br.
		[illegible]	03.00	50.5		[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	—10 [illegible]	[illegible]	17 57 [illegible]	29 51 44.4	Br.
		[illegible]	01.58	25.7		[illegible] 01.52	[illegible]	N. G. C. [illegible] too great.
[illegible]	[illegible]	[illegible]	[illegible]	—11 50.0	566	17 57 12.21	29 51 44.4	Pretty ft.
		[illegible]	[illegible]	52.6		[illegible] 13.26	[illegible] 52.1	
[illegible]	[illegible]	[illegible]	+0 50.07	+ 9 24.7	568	17 57 52.88	[illegible] 23.0	Pretty ft.
		[illegible]	[illegible]	[illegible]		+0 [illegible]	[illegible] 25.3	
[illegible]	[illegible]	[illegible]	[illegible]	+ 4 39.7	[illegible]	17 57 41.10	[illegible] 7 40 07.8	Ft. diffuse.
		[illegible]	[illegible]	[illegible]		[illegible]	[illegible]	

No.	N. G. C. No.	Epoch.	Observed $\Delta\alpha$	Observed $\Delta\delta$	No.	Position 1908.0 α	Position 1908.0 δ	Description and Notes.
			M. S.	′ ″		H. M. S.		
568	6540	1908.4	+0 48.70	+ 4 00.5	570	17 59 02.88	—27 50 19.8	Pretty ft.
		09.4	48.88	00.0		+0 48.80	[illegible]	N. G. C. α 6^s too great, δ 3′ too great.
569	6541	1908.5	—0 06.72	+ 6 25.8	571	18 01 17.24	—25 06 55.2	Pretty br.
		09.4	06.76	[illegible]		—0 06.74	[illegible]	
570	6553	1908.5	+0 55.05	—11 52.6	572	18 02 10.05	—25 43 39.0	Ft. lrg. diffuse.
		09.4	55.10	46.4		+0 [illegible]	—11 50.2	N. G. C. α 8^s too great.
571	6558	1906.5	—0 02.85	—3 [illegible]	573	[illegible]	—31 33 00.0	Pretty br.
		08.5	03.07	31.8		—0 03.01	13 50.8	
572	6560	1908.5	+0 01.92	+ 8 21.7	574	18 07 06.50	—31 50 31.8	Pretty br. diffuse.
		09.4	02.35	24.6		+0 02.17	+8 23.2	
573	6624	1906.5	—1 49.72	— 6 13.0	576	18 19 05.01	—30 18 25.4	Br.
		07.7	49.65	14.2		—1 49.70	—6 12.6	
574	6626	1906.5	+0 33.25	— 6 00.3	575	18 17 50.90	—24 40 16.9	Br large
		07.7	33.[illegible]	5 58.4		+0 33.21	—5 50.7	
575	6629	1908.5	—0 [illegible]	— 7 19.1	577	18 19 30.73	—23 08 09.2	Br. sm.
		09.4	02.10	22.1		—0 01.96	—7 20.6	
576	6638	1906.5	+0 36.72	+ 3 01.7	578	18 24 08.81	—25 36 57.6	Br.
		07.7	36.40	03.7		+0 36.57	+3 02.3	
577	6637	1907.5	+0 13.08	— [illegible]	580	18 24 39.08	—32 21 20.0	Br.
		08.5	12.75	41.3		+0 12.91	—3 39.9	
578	6642	1906.7	+1 25.02	—13 [illegible]	579	18 24 24.67	—23 19 01.5	Pretty br.
		07.7	24.77	37.0		+1 24.86	—13 30.0	
579	6652	1906.7	+1 48.50	— 1 [illegible]	581	18 27 24.12	—33 05 25.9	Br.
		07.7	48.[illegible]	19.6		+1 48.49	+1 17.9	
580	6681	1906.7	+1 03.23	+ 4 25.9	582	18 35 30.10	—32 27 40.2	Br.
		07.7	02.87	23.0		+1 03.07	+4 24.3	
581	6712	1906.7	—0 15.73	— 1 40.5	584	18 47 53.30	— 8 47 30.0	Pretty br. lrg.
		07.7	16.07	43.5		—0 15.01	—1 41.9	
582	6718	1907.7	+1 33.47	[illegible]	583	18 47 05.78	—30 30 55.5	Very br.
		08.5	33.45	22.4		+1 33.45	—5 22.2	
583	6717	1908.5	—0 00.3[illegible]	— 5 [illegible]	585	18 49 04.40	—22 47 46.3	Ft. sm.
		09.5	00.50	51.1		—0 00.43	[illegible]	
584	[illegible]	1908.5	+0 00.85	— 1 40.6	585	18 49 04.40	—22 47 46.3	Very ft. sm.
		09.5	00.50	40.2		+0 00.76	—1 40.5	Bigourdan.
585	6723	1908.5	—0 00.95	[illegible]	586	18 52 59.04	—30 55 18.0	Br lrg
		09.5	[illegible]	20.9		—0 10.02	+0 18.3	
586	6743	1906.5	—0 26.55	[illegible]	587	19 01 01.28	— 6 13 36.7	Pretty br. sm.
		07.7	26.78	58.8		—0 [illegible]	[illegible]	
587	6772	1908.5	—0 42.[illegible]	[illegible]	588	19 08 41.00	—2 [illegible]	Very ft. lrg.
		09.5	42.47	1.6		+0 42.38	[illegible]	
588	6778	1906.5	—0 [illegible]	[illegible]	589	19 [illegible]	[illegible]	Ft. sm.
		07.7	[illegible]	[illegible]		—0 [illegible]	—1 02.8	N. G. C. α 6^s too small, δ 1′ too great.

			M.	S.			H.	M.	S.				
												02.4	
				55.27									
												43.5	Very br
												30.3	
			+1	56.02	+	4 54.6	593						
						50.3		+1	57.02		+	54.5	
								20	20 16.80		25	16 20.4	Pretty ft.
		08.8		07.02		20.3		—1	07.00				
			—1	52.42				20	24 25.37			06.0	Pretty ft.
		07.3		53.41				—1	52.48				
			—2	24.25			597	20	30 31.46			16.0	Pretty br.
				24.22		51.5		—2	24.23			53.9	
		1006.7	—0	05.00									Pretty ft.
		07.7		05.22		35.7		—0	05.11				
		1006.7	+2	23.12	+	1 21.2		20	30 40.02		0	04 06.5	Pretty ft.
		07.7		23.12				+2	23.19				
		1007.7	+1				600	20	42 00.49		8	48	Ft.
		08.7											
600	6400	1006.8	—0									47.4	Br.
		07.7		18.32				—0	18.31			54.7	
	7084	1006.8	+0	20.50			602	20	58 24.15			00.7	Br. lrg. planetary.
		07.7		20.20		33.6		+0	20.33			33.0	
602	7037	1006.8										47.6	Very ft.
		07.7		46.32		07.1		+1	46.32			00.1	
603	7099	1006.8			+	4 52.6	604	21	22 04.41		2	00 49.7	Very ft.
				51.02		58.2					+4	55.1	
604		1006.8	—0	58.22			605				2	00	
		07.7		58.65		57.3						54.5	
605	7050	1006.8	+0	16.27			607	21	28 02.18		1	33 07.3	
								+0	16.27		+17		
606		1006.8					606						
		07.7				35.8		+0	37.28			38.3	
607	7080	1006.8	+0	25.53	+	1 09.8	608	21	34 15.67		23	39 03.0	Br. lrg.
		07.7				06.1		+0	25.48		+1	07.8	
608	7110	1006.8	—3	58.85							4	03 24.6	Very ft.
		07.7				24.6		—1			—1	22.5	Stephan's δ 1′ too small.
		09.9		59.43		20.6							
609	7114	1008.8			+	8 45.7					—13	35 03.4	Pretty ft.
		09.9											

No.	N. G. C. No.	Epoch.	Observed $\Delta\alpha$	Observed $\Delta\delta$		Star. Place and Difference, 1900 α	Star. Place and Difference, 1900 δ	Description and Notes.
			M. S.	′ ″		H. M. S.	′ ″	
608	7171	1907.7	—0 03.00	—14 49.7	612	21 55 41.77	13 30 15.9	Very ft.
		08.7	02.70	38.7		—0 02.90	—14 45.1	
609	7172	1906.8	—0 30.95	+15 51.5	613	21 56 43.30	—32 36 59.3	Very ft.
		07.7	31.25	50.4		—0 31.08	+15 51.2	
610	7173	1906.8	—0 30.30	+0 39.0	613	21 56 43.30	—32 36 59.3	Pretty br. sm.
		07.7	30.12	41.9		—0 30.20	+0 40.7	
611	7176	1906.8	0 24.00	+ 8 37.4	613	21 56 43.30	—32 36 59.3	Pretty br. sm.
		07.7	24.45	39.8		—0 24.51	+8 38.8	
612	7180	1906.8	—2 07.78	— 8 01.3	614	21 58 53.50	—20 53 46.7	Pretty br.
		07.7	07.42	00.8		—2 07.64	—8 00.3	N. G. C. α 5^s too small.
613	7183	1907.8	—3 33.58	+ 0 56.8	615	22 00 24.26	—19 25 03.2	Very ft.
		08.7	32.60	1 09.5		—3 33.08	+1 03.2	
		08.8	32.05	0 50.7				
614	7184	1906.8	+2 09.70	+ 0 12.2	611	21 54 57.37	—21 17 55.1	Pretty br. lrg. diffuse.
		07.7	09.85	06.7		+2 09.75	+0 09.5	
		07.7	09.65	11.8				
615	7185	1906.8	—1 20.05	— 3 30.2	614	21 58 53.50	—20 53 46.7	Pretty ft.
		07.7	29.10	27.1		—1 20.10	—3 28.1	
616	7218	1906.8	+1 45.80	— 7 05.9	616	22 02 50.31	—17 01 56.5	Ft. lrg.
		07.7	46.30	07.7		+1 46.05	—7 07.4	
617	7225	1906.8	+0 10.72	+10 45.6	617	22 07 19.49	—26 40 15.4	Pretty ft.
		07.7	10.70	41.9		+0 10.73	+10 43.8	
618	7230	1907.8	—0 45.43	+ 4 07.9	618	22 09 32.10	—17 38 26.8	Very ft.
		08.8	45.02	14.6		—0 45.22	+4 11.4	
619	7247	1906.8	+0 10.33	— 1 18.2	619	22 11 56.79	—24 12 36.3	Ft.
		07.8	09.82	15.7		+0 10.07	—1 17.0	N. G. C. α 27^s too great.
620	7251	1906.8	—0 38.80	— 1 23.7	622	22 15 42.15	—16 15 11.0	Ft.
		07.8	39.30	25.0		—0 39.05	—1 24.3	
621	7252	1906.8	+1 04.82	— 2 23.1	620	22 14 06.34	—25 08 27.7	Ft.
		07.8	04.38	26.5		+1 04.61	—2 25.1	
621		1906.8	—1 56.32	+ 0 54.7	623	22 17 07.37	—25 11 50.3	
						1 56.33	+0 55.2	
622	7260	1906.8	+2 04.32	+ 2 20.2	621	22 15 20.64	— 4 39 48.4	Very ft.
						+2 04.33	+2 19.7	
622		1906.8	—0 50.15	—16 32.4	624	22 18 23.67	— 4 21 04.0	
						—0 50.17	—16 32.2	
622		1906.8	—1 36.67	— 6 51.4	625	22 19 01.29	— 4 30 39.6	
		07.8	36.62	58.4		—1 36.66	—6 54.5	
623	Big. (7266)	1906.8	+0 24.05	—13 44.3	624	22 18 23.67	— 4 21 04.0	Ft.
		06.8	24.37	44.3		+0 24.22	—13 43.7	N. G. C. α 24^s too small, δ 6′ too small.
		06.8	24.27	42.1				
623		1906.8	—0 13.57	— 4 09.8	625	22 19 01.29	— 4 30 39.6	
		07.8	13.87	09.9		—0 13.72	—4 09.8	

		08.8								
		1907.7	+2	00.57						
		08.8		00.75						
		07.7		01.40						
		1906.8		30.85						Very ft.
				30.85						
		1906.8	+0	41.—					−13 28 40.7	Very ft.
		07.8		42.08		41.4		+0 42.02		
		1907.8		12.50						
		08.8				03.8		−1 12.37	+0 06.4	
	7414								− 4 44 38.1	
		07.8		50.76						
										05.1
		07.8		27.22						01.4
632		1906.8	+0	00.91	+11	51.2	634			Ft.
		07.8		10.25						50.3
		1907.8	−1	42.60						50.7
		08.8				44.2				45.0
				10.25				22 40 58.06		29.0
				10.30		52.1		−0 10.30		
	7377			51.62	— 6	24.5	635	30.06	−22 43 56.5	Pretty br.
									−6 24.1	
			−1	42.45				05.04	−22 54 59.3	
				42.22		42.1		−0 42.36		39.1
		1907.8	−0	58.40	+ 0	38.3				23.0
		08.8		58.27		44.2			+0 41.4	
								00.76		40.0
		07.8				48.8				49.0
				38.80			643	22 46 06.38	− 2 10 58.0	
		07.8		38.65		27.5			+6 27.3	
	7402	1906.8		10.17	+10	57.8	644		−21 28 14.6	Pretty br.
		07.8		10.62		57.4		+0 10.42		
		1906.8					640	52.16		Very ft.
		07.8				29.9				27.7
		1906.8			+			03.68	− 6 07 57.2	
		07.8						23.02	+2 40.9	
	7400	1906.8	−0	20.75	+	44.7	645	09.82		22.7
		07.8		20.52				20.65		41.6
640		1906.8		10.90			646	19.66	— 6 07 06.9	
				10.83						

No.	N. G. C.	Epoch.	Observed $\Delta\alpha$	Observed $\Delta\delta$		Star. Place and Difference. 1900 α		δ	Description and Notes.
			M. S.	′ ″		H. M. S.		′ ″	
641	7428	1906.8	—0 04.68	— 1 51.8	647	22 52 16.33		— 1 33 07.4	Ft.
		07.8	04.67	53.1		—0 04.68		—1 52.5	
642	7443	1907.8	+0 35.98	— 2 55.5	648	22 54 17.62		-13 17 43.4	Pretty br.
		08.8	35.87	53.8		+0 35.02		—2 54.6	
643	7444	1907.8	+0 36.15	— 4 35.7	648	22 54 17.62		—13 17 43.4	Pretty br.
		08.8	36.05	35.2		+0 36.10		—4 35.5	
644	7450	1907.8	+1 14.75	— 9 32.8	648	22 54 17.62		—13 17 43.4	Very ft.
		08.8	15.16	34.9		+1 14.05		—9 33.0	Tempel's α 6^s too great.
645	7453	1906.8	—1 07.08	+12 59.4	649	22 57 21.05		- 7 06 39.2	Pretty br. A 11th mag. star pr. n.
		07.7	07.12	57.6		—1 07.10		+12 58.6	
646	7484	1907.8	—0 00.17	+ 0 45.9	650	23 01 33.80		—36 49 41.3	Pretty br.
		08.8	00.00	45.4		—0 00.09		+0 45.6	
647	7506	1905.8	—0 24.12	— 0 43.7	652	23 06 50.63		— 2 41 27.9	Pretty ft.
		06.8	24.00	45.4		—0 24.06		—0 44.5	
647		1906.8	—0 31.47	— 6 46.6	653	23 07 04.19		- 2 35 23.7	
						—0 31.47		—6 46.5	
648	7507	1905.8	—2 25.21	- 4 51.4	656	23 09 09.51		—29 00 09.2	Pretty br.
		06.8	25.32	51.3		—2 25.31		—4 51.1	
649	7513	1907.8	—0 04.87	+ 3 27.7	654	23 07 54.05		—28 57 25.3	Ft. lrg. diffuse.
		08.8	04.06	19.3		—0 04.45		+3 23.5	
650	7521	1907.7	+1 53.20	— 3 25.7	651	23 06 33.75		- 2 13 06.6	Very ft.
		08.8	53.45	23.4		+1 53.32		—3 24.8	
651	7550	1907.8	+1 38.12	+15 09.8	655	23 08 57.78		- 3 10 44.1	Pretty br.
		08.8	38.58	06.8		+1 38.36		+15 08.1	
652	7570	1906.8	—0 30.65	—12 19.6	657	23 12 44.19		— 5 04 05.3	Ft.
		07.8	30.63	21.0		—0 30.64		—12 20.3	
653	7585	1905.8	—3 20.47	+ 1 25.2	662	23 16 12.28		— 5 13 11.4	Pretty br.
						—3 20.47		+1 25.5	
653		1905.9	+0 07.86	— 7 44.8	657	23 12 44.19		- 5 04 05.3	
		06.8	08.02	42.4		+0 07.93		—7 42.8	
		07.8	07.90	41.2					
654	7600	1906.8	+0 31.77	— 8 35.0	659	23 13 11.43		7 58 59.3	Pretty br.
		07.8	31.85	41.4		+0 31.84		—8 38.7	
		08.8	31.90	39.7					
655	7603	1907.8	+0 30.17	—15 08.3	658	23 12 59.63		— 0 03 06.8	Very ft. stellar.
		08.8	50.20	04.2		+0 50.17		—15 06.3	
656	7606	1905.9	—1 30.64	+ 3 57.8	660	23 15 24.16		— 0 05 51.2	Pretty br. lrg. elong.
		06.9	30.75	58.8		—1 30.70		+3 58.5	
656		1906.9	—1 57.10	+ 0 48.2	661	23 15 50.91		— 0 02 39.5	
						—1 57.31		+0 48.6	
657	7665	1907.8	+ 1 46.05	— 7 11.2	663	23 23 50.36		0 48 58.3	Pretty ft.
		08.8	46.13	09.7		+1 46.11		— 7 11.8	N. G. C. δ 2′ too great.
658	7701	1905.7	— 2 13.12	+ 6 26.8	667	23 31 36.44		- 3 30 54.2	Ft. sm.
		06.9	13.17	26.0		—2 13.15		+6 26.5	

No.	Mag.	Epoch	Observed	Corrected	Plate	Star Place, 1900		Remarks and Notes
						R. A.	Dec.	
						h m s		
						33 43		
[illegible]	7700	1905.0	[illegible]			[illegible]	[illegible]	[illegible]
		08.8	00.74	22.8				[illegible]
[illegible]	7703	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
		07.8	[illegible]	52.0		58.40		
[illegible]	7703	1907.8	— [illegible]	+ 6 22.0	665	23 20 50.02	— 0 21 42.8	[illegible]
		08.8	[illegible]	[illegible]		[illegible]	[illegible]	
[illegible]	7707	[illegible]	[illegible]	[illegible]	669	23 32 [illegible]	[illegible]	[illegible]
		08.8	18.70	[illegible]		18.74	[illegible]	[illegible]
[illegible]	[illegible]	1909.7	[illegible]	— 2 22.8	672	[illegible] 01.25	— 7 01 54.0	Pretty ft.
		06.9	[illegible]	20.8		—2 [illegible]	—2 21.7	
[illegible]	[illegible]	[illegible]	[illegible]	— 0 50.2	671	[illegible]	[illegible]	[illegible]
						[illegible]	—0 50.1	
064		1906.8	[illegible]	[illegible]	668	28.40	—13 36 53.4	
						17.82	+5 58.6	
[illegible]	[illegible]	[illegible]	[illegible]	+ 0 57.4	[illegible]	23 34 06.27	—12 51 50.4	Pretty ft.
		06.8	[illegible]	[illegible]		[illegible]	+0 58.0	
		07.8	[illegible]	58.9				
[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
						—3 17.40	[illegible]	
[illegible]	[illegible]	1907.8	[illegible]	[illegible]	[illegible]	23 37 50.41	[illegible]	Very ft.
		08.8	[illegible]	41.6		+2 [illegible]	—2 42.3	[illegible]
[illegible]	7750	1907.8	[illegible]	+ 9 24.3	[illegible]	23 43 [illegible]	[illegible]	Ft.
		08.8	14.80	28.7		+0 44.82	[illegible]	[illegible]
		09.9	[illegible]	24.0				
[illegible]	7783	1906.9	[illegible]	[illegible]	676	23 49 03.17	[illegible]	Ft.
		07.0	+0 00.05	[illegible]		[illegible] 00.02	[illegible]	
		07.8	[illegible]	25.0				
[illegible]	Algol	1907.8	+0 19.67	[illegible]	[illegible]	23 53 [illegible]	— 4 50 40.0	Ft. diffuse.
		08.8	19.26	39.4		[illegible]	[illegible]	[illegible] 2′ too [illegible]

Catalogue of Nebulae.

No.	N.G.C. No.	Date	R.A. 1900	Precession	Dec. 1900	Diameter	Obs.	Plates
			h m s		° ′ ″			
1	Nova	1908.3	0 24 52.84		+ 6 07 18.3	+20.048—0.181	3	1
2	11	1907.3	06 00.64		+ 12 30 49.4	20.450—0.20	1	1
3	47	1907.3	09 24.27		— 7 43 25.6	20.035—0.26	1	1
4	56	1907.3	09 38.27		— 7 54 01.1	20.034—0.28	1	1
5	91	1908.3	11 18.13		— 6 52 36.9	20.008—0.41	2	1
6	Appen.	1908.3	0 13 49.00	+3.0073+0.07	— 3 49 58.0	+20.016—0.36	2	1
7	113	1906.4	21 48.24		3 03 18.3	19.961—0.52	2	1
8	124	1906.8	21 51.26		— 2 20 23.0	19.961—0.52	1	1
9	128	1906.8	22 09.55		+ 2 19 59.1	19.958—0.52	1	1
10	134	1908.3	25 25.45		—33 47 50.5	19.993—0.56	2	1
11	145	1907.4	0 26 39.86		5 42 14.1	+19.916—0.61	1	1
12	148	1908.3	28 58.82		—10 15 23.1	19.891—0.64	1	1
13	Nova	1908.3	29 18.58		— 28 21 19.3	19.888—0.64	1	1
14	Nova	1906.9	29 19.54		—32 29 21.9	19.888—0.64	2	1
15	157	1906.9	29 37.55		—11 19 06.6	19.885—0.66	2	1
16	162	1907.4	29 41.71		— 8 56 58.1	+19.884—0.660	1	1
17	169	1906.9	32 56.53	3.0302—0.18	10 40 22.1	19.870—0.68	2	1
18	175	1908.3	32 21.90	3.0024—0.68	—20 29 12.9	19.852—0.69	2	1
19	190	1908.3	33 56.00		— 9 33 12.6	19.844—0.71	3	1
20	Nova	1908.3	34 06.98		—14 43 20.6	19.840—0.71	1	1
21	Nova	1908.3	0 34 28.66	+3.0182—0.30	—15 12 15.9	+19.826—0.75	3	1
22	210	1906.9	35 33.54	3.0196—0.34	—14 25 21.7	19.811—0.78	2	1
23	217	1906.9	36 30.92		+ 10 34 16.3	19.797—0.80	2	1
24	227	1908.3	37 30.42	3.0648+0.20	— 2 04 32.7	19.784—0.82	1	1
25	237	1908.3	38 21.07		— 0 40 22.3	19.772—0.83	1	1
26	240	1908.3	0 39 32.07	+3.0554+0.19	4 18 24.1	+19.757—0.85	1	1
27	243	1908.3	40 47.00	3.0042—0.39	—16 08 39.6	19.746—0.86	1	1
28	245	1906.4	40 53.31		— 2 16 12.6	19.745—0.87	1	1
29	246	1908.3	42 39.59		— 25 50 14.0	19.726—0.88	1	1
30	247	1908.3	42 45.80		+ 12 00 48.1	19.704—0.91	2	1
31	250	1908.2	0 42 57.75	+3.0582+0.26	— 3 19 18.2	+19.722—0.89	1	1
32	255	1907.4	42 58.63	3.0637+0.32	— 2 06 42.6	19.722—0.89	1	1
33	268	1908.3	45 05.09	3.0464+0.16	— 5 44 25.7	19.665—0.95	2	1
34	270	1908.3	45 29.77	3.0300—0.02	— 9 11 46.2	19.658—0.96	1	1
35	271	1908.3	45 35.62	3.0614+0.32	— 2 27 18.1	19.657—0.97		
36	274	1906.9	0 45 58.27	+3.0371+0.06	— 7 36 04.7	+19.650—0.97	1	1
37	279	1908.3	47 02.82	3.0596+0.31	— 2 45 43.9	19.631—1.00	1	1
38	289	1908.4	47 53.25	2.9912—1.15	—31 45 02.4	19.616—1.02	1	2
39	295	1906.4	49 59.33	3.0327+0.08	— 7 52 29.5	19.577—1.04	1	1
40	300	1908.3	51 41.24		—10 27 27.5	19.550—1.05	1	1

No.	[illegible]	Epoch.	R. A. [illegible]	Precession [illegible]	Dec. [illegible]	Precession 1900 + t	No. of Nights	No. of Stars
			H. M. S.	S.	″	″		
[illegible]	337	1906.9	0 54 47.68	[illegible]	— 8 07 09.5	+19.482—1.13 t	2	2
42	341	1907.6	55 43.83	3.0175+0.03	— 9 43 34.2	19.402—1.15	3	2
43	349	1908.4	56 47.79	3.0308+0.14	— 7 20 20.5	19.430—1.16	2	1
44	351	1908.4	56 52.30	3.0585+0.38	— 2 28 26.0	19.438—1.17	2	1
45	352	1907.6	57 04.61	3.0451+0.26	— 4 47 11.5	19.434—1.18	2	1
46	356	1908.4	0 58 04.35	+3.0284+0.14	— 7 31 33.8	19.412—1.19	2	1
47	357	1908.4	58 18.91	[illegible]	— 6 52 35.7	19.406—1.20	2	1
48	364	1908.4	59 33.82	3.0647+0.44	— 1 20 21.0	19.379—1.23	2	1
49	426	1908.4	1 07 41.73	3.0672+0.51	0 49 16.2	19.184—1.30	2	1
50	429	1908.4	07 50.59	3.0667+0.51	0 52 34.2	19.180—1.39	2	1
51	430	1908.4	1 07 53.14	+3.0674+0.51	— 0 46 58.5	+19.179—1.30	2	1
52	439	1908.4	09 05.49	2.8225—0.94	—32 16 33.2	19.148—1.30	2	1
53	442	1908.4	09 32.53	3.0619+0.48	— 1 33 00.0	19.136—1.42	2	1
54	448	1906.5	10 10.52	3.0575+0.45	2 09 21.5	19.120—1.42	2	1
55	497	1906.4	17 17.74	3.0619+0.52	— 1 23 55.2	18.922—1.55	2	1
56	541	1906.9	1 20 38.49	+3.0574+0.52	— 1 54 04.7	+18.824—1.62	3	1
57	547	1906.9	20 54.29	3.0576+0.52	1 51 52.8	18.816—1.62	3	1
58	560	1908.4	22 20.01	3.0527+0.50	— 2 25 57.0	18.772—1.64	2	1
59	564	1908.4	22 42.83	3.0529+0.50	— 2 23 52.5	18.760—1.64	2	1
60	570	1908.4	23 52.30	3.0605+0.55	1 27 57.5	18.724—1.67	2	1
61	577	1908.4	1 25 35.27	+3.0513+0.51	— 2 30 42.0	+18.670—1.70	2	1
62	578	1908.4	25 42.55	2.8635—0.39	—23 11 00.2	18.666—1.61	2	1
63	584	1907.6	26 20.02	3.0090+0.28	— 7 22 58.8	18.648—1.69	3	2
64	585	1908.4	26 35.87	3.0602+0.57	— 1 26 50.4	18.638—1.72	2	1
65	590	1906.9	27 51.13	3.0065+0.30	— 7 32 44.6	18.597—1.72	2	1
66	613	1908.4	1 29 40.57	+2.7791—0.63	—29 55 53.9	+18.537—1.63	2	1
67	615	1906.9	30 05.71	3.0021+0.29	— 7 51 10.2	18.522—1.75	2	1
68	636	1906.4	34 06.80	2.9975+0.31	8 01 17.4	18.385—1.83	2	1
69	682	1906.9	44 13.70	2.9105+0.05	—15 28 24.7	18.015—1.94	2	1
70	681	1906.9	44 14.91	2.9594+0.23	—10 55 28.8	18.013—1.97	2	1
71	686	1908.4	1 44 15.50	+2.8075—0.29	24 17 43.7	+18.013—1.88	2	2
72	Nova	1908.6	45 29.97	2.9784+0.31	9 01 10.4	17.965—2.01	3	1
73	701	1907.6	46 07.32	2.9653+0.26	—10 11 55.1	17.941—2.01	3	1
74	702	1908.4	46 16.45	3.0251+0.51	— 4 33 02.1	17.934—2.05	2	1
75	707	1908.4	46 29.87	2.9778+0.32	9 00 02.6	17.926—2.03	2	1
76	720	1906.9	1 48 08.77	+2.9185+0.12	—14 13 55.5	17.861—2.01	2	2
77	723	1908.4	49 06.13	2.7967—0.25	—24 15 00.0	17.823—1.95	2	1
78	731	1908.4	49 59.50	2.9604+0.31	— 9 30 08.2	17.787—2.08	2	1
79	749	1907.4	51 11.03	2.7067—0.44	—30 24 41.3	17.738—1.91	2	1
80	748	1907.4	51 20.03	3.0192+0.51	4 57 30.5	17.732—2.12	2	1
81	755	1908.4	1 51 26.48	+2.9676+0.32	9 33 07.9	17.728—2.10	2	1
82	762	1908.4	51 56.98	3.0080+0.47	5 53 24.1	17.707—2.14	2	1
83	773	1908.4	53 58.71	2.9371+0.23	—12 00 01.1	17.623—2.13	2	1
84	779	1906.8	54 42.72	3.0002+0.46	— 6 27 01.3	17.592—2.18	2	1
85	787	1908.4	55 52.47	2.9645+0.34	— 9 29 14.5	17.544—2.17	2	1
86	788	1907.4	1 56 07.50	+2.9903+0.43	7 17 58.2	17.533—2.19	2	1
87	806	1908.4	58 36.09	2.9512+0.32	—10 24 49.9	17.427—2.20	2	1
88	830	1908.4	2 03 44.83	2.9729+0.41	— 8 15 54.2	17.199—2.31	2	1
89	830	1908.6	04 01.16	2.9730+0.41	— 8 14 23.1	17.187—2.31	3, 2	1
90	833	1908.4	04 26.26	2.9434+0.34	—10 36 25.1	17.168—2.29	2	1

		Epoch						
		1908.4					+ 17.165—2.201	
							17.162—2.30	
		1908.4						
		1908.4	04 53.62			8 14		2
			2 06 08.38				+ 17.091—2.40	
					— 9 46	35.3	17.062—2.34	
	856	1908.4	08 32.26		— 1	11 08.3	16.080—2.45	2
	893	1908.4	09 27.87				16.037—2.46	2
100		1908.4	11 40.18		11	48 50.0		2
		1907.0		+ 2.0800 + 0.50	— 7	06 03.2	+ 16.732—2.48	
		1907.0	14 07.28				16.716—2.47	
		1908.4	16 36.62	2.0941 + 0.54				
	800	1908.4			— 21	16 52.6	16.563—2.36	
105	907	1908.4	18 25.56	2.7788 + 0.04	— 21	10 05.8	16.505—2.38	
	908			+ 2.7706 + 0.02	— 21	41 23.5	+ 16.502—2.36	
		1908.0	20 33.07	2.7008 — 0.07	— 25	15 05.9	16.398—2.34	2
108		1907.0	22 32.38	3.0500 + 0.74	— 1	36 20.2	16.301—2.67	
		1908.5	23 45.33	2.9202 + 0.40	— 10	59 12.3	16.235—2.57	
110	955	1908.5	25 27.93	3.0512 + 0.75			16.147—2.71	
		1908.5	2 25 40.02	+ 3.0258 + 0.07	— 3	22 58.1		
	907		27 31.22	2.8183 + 0.10	— 17	39 33.5	16.041—2.53	
110	003		33 06.46	3.0474 + 0.75	— 1	45 10.4	15.741—2.82	2
		1906.5	33 36.00	2.9691 + 0.55	— 7	06 39.2		
	1035	1908.4	34 35.12	2.9470 + 0.50	— 8	34 01.4	15.661—2.76	
		1908.4	2 35 26.33	+ 2.9865 + 0.50		52 12.7	+ 15.615—2.80	
		1908.4	35 39.13	2.8987 + 0.41	— 11	42 24.0		2
			36 10.45	2.9441 + 0.51	— 8	41 04.7		3
			37 33.65	3.0662 + 0.81	— 0	26 20.6	15.500—2.91	2
	1076	1908.5					15.431—2.71	
		1908.5	2 39 25.54			29 25 39.0	+ 15.304—2.49	3
		1908.5	40 23.00	2.8256 + 0.29	— 16	00 37.6	15.340—2.72	
		1907.0					15.301—2.85	
		1907.5	41	3.0588 + 0.79			15.285—2.95	
		1908.4	41 27.53	3.0626 + 0.80			15.278—2.96	
	1097	1908.4		+ 2.5572 + 0.05	— 30	41 38.8	+ 15.245—2.49	2
			42 21	3.0620 + 0.80	— 0	42 17.7	15.227—2.97	2
			45 34.86	3.0305 + 0.75	— 2	08 51.5	15.042—3.00	2
		1908.4	47 00.55		— 17	03 43.5		
		1907.0	47 46.86	3.0404 + 0.78				
		1908.6	2 49	+ 2.9066 + 0.48	— 10	26 04.5	+ 14.800—2.93	
			50 03.17	3.0635 + 0.82	— 0	35 06.4	14.780—3.08	
		1908.5		3.0635 + 0.82	— 0	35 23.0	14.780—3.08	
			53 17.74		— 10	45 52.2	14.587—2.96	
		1909.4	53 23.29	2.8084 + 0.48			14.581—2.96	
		1908.5		+ 2.8635 + 0.43				
				2.8189 + 0.37			14.360—2.93	
		1908.5	58 10.85		— 23	15 39.4	14.292—2.79	2
		1908.5	58 58.03	2.8027 + 0.35				
	1200	1908.5		2.8659 + 0.44	— 12	22 59.4	14.234—3.01	

No.	N. G. C. No.	Epoch.	R. A. 1900.	Precession 1900 + t	Decl. 1900.	Precession 1900 + t	No. of Nights.	No. of Stars.
			H. M. S.	S.	° ′ ″	″		
141	1201	1907.0	2 59 47.88	+2.6027+0.137	—26 27 39.2	+14.192—2.74t	2	2
142	1208	1907.7	3 01 21.08	2.9003+0.52	— 9 55 46.6	14.095—3.07	3, 2	1
143	1209	1908.5	01 22.94	2.7990+0.36	15 59 55.6	14.093—2.97	2	1
144	1211	1907.0	01 46.88	3.0530+0.80	— 1 10 52.2	14.068—3.24	2	1
145	1222	1908.5	03 54.95	3.0166+0.72	— 3 20 16.4	13.935—3.22	2	1
146	1232	1908.5	3 05 15.29	+2.7024+0.26	—20 57 43.2	+13.851—2.91	2	1
147	1238	1907.1	06 04.68	2.8819+0.49	—11 07 33.9	13.798—3.11	2	1
148	1241	1908.5	06 23.24	2.9137+0.54	— 9 18 02.3	13.779—3.15	2	1
149	1247	1908.5	07 25.53	2.8858+0.51	—10 51 24.9	13.713—3.13	2	1
150	1248	1908.5	07 50.64	2.9760+0.65	— 5 36 02.4	13.686—3.23	2	1
151	1285	1908.5	3 12 59.22	+2.9384+0.60	— 7 40 00.1	+13.355—3.25	2	1
152	1297	1908.5	14 42.58	2.7170+0.31	—19 27 54.6	13.241—3.03	2	1
153	1300	1907.1	15 10.05	2.7111+0.31	—19 46 27.0	13.210—3.03	2	1
154	1302	1908.5	15 33.69	2.5722+0.20	—26 25 27.4	13.184—2.88	2	1
155	1304	1908.5	16 14.29	2.9853+0.67	— 4 56 38.9	13.140—3.34	2	1
156	1305	1907.1	3 16 20.36	3.0254+0.74	— 2 40 40.3	+13.132—3.39	2	2
157	1309	1908.5	17 27.88	2.7865+0.39	—15 45 28.6	13.058—3.14	2	1
158	1315	1908.5	18 40.28	2.6665+0.28	—21 43 55.9	12.978—3.02	2	1
159	1320	1908.5	19 47.36	3.0120+0.72	— 3 23 48.4	12.904—3.42	2	1
160	1321	1908.5	19 47.43	3.0124+0.72	— 3 22 12.4	12.904—3.42	2	1
161	1324	1908.5	3 20 05.07	+2.9633+0.65	— 6 05 54.0	+12.884—3.37	2	1
162	1329	1909.5	21 28.83	2.7394+0.36	—17 56 36.3	12.791—3.14	2	1
163	1332	1908.5	21 51.01	2.6628+0.29	—21 41 08.5	12.765—3.05	2	1
164	1337	1908.5	23 15.33	2.9135+0.58	— 8 44 12.2	12.669—3.35	2	1
165	1339	1908.5	24 06.01	2.4073+0.18	—32 37 54.4	12.612—2.79	2	1
166	1340	1908.0	3 24 15.94	+2.4374+0.18	—31 24 50.2	+12.593—2.82	1	2
167	1346	1908.5	25 16.79	2.9651+0.64	— 5 53 11.6	12.533—3.43	2	1
168	1353	1908.5	27 36.43	2.6055+0.31	—21 09 32.4	12.372—3.11	2	1
169	1354	1908.5	27 51.23	2.7705+0.42	—15 33 36.2	12.355—3.24	2	1
170	1355	1908.6	28 26.00	2.9742+0.66	— 5 20 13.8	12.315—3.48	2	1
171	1357	1907.5	3 28 36.17	+2.8095+0.46	—14 00 05.4	+12.304—3.30	2	1
172	1358	1908.6	28 42.33	2.9724+0.66	— 5 25 35.3	12.297—3.47	2	1
173	1359	1908.6	29 18.99	2.6912+0.34	—19 49 46.5	12.256—3.16	2	1
174	1362	1908.6	29 25.66	2.6745+0.33	—20 37 06.4	12.246—3.14	2	1
175	1365	1908.5	29 47.84	2.2893+0.20	—36 28 31.4	12.221—2.70	2	1
176	1371	1908.0	3 30 44.12	+2.5709+0.27	—25 16 01.3	+12.155—3.04	4	1
177	1374	1908.7	31 25.62	2.3110+0.19	—35 33 31.7	12.107—2.74	3	1
178	1377	1908.5	32 13.37	2.6577+0.32	—21 14 00.1	12.053—3.15	2	1
179	1380	1908.5	32 35.76	2.3158+0.19	—35 18 22.4	12.027—2.76	2	1
180	1383	1908.5	33 08.05	2.7107+0.36	—18 40 03.1	11.990—3.22	2	1
181	1385	1908.6	3 33 10.70	+2.5767+0.28	—24 49 50.9	+11.986—3.06	2	1
182	1393	1908.5	34 07.96	2.7077+0.36	—18 45 18.0	11.919—3.22	2	1
183	1395	1907.1	34 08.99	2.6084+0.29	—23 21 17.6	11.917—3.11	2	1
184	1398	1908.6	34 38.93	2.5319+0.25	—26 39 49.7	11.882—3.02	2	1
185	1399	1908.6	34 39.66	2.2968+0.21	—35 46 35.0	11.882—2.75	2	1
186	1401	1908.6	3 35 00.38	+2.6140+0.30	—23 03 03.3	+11.857—3.12	2	1
187	1400	1908.6	35 00.95	2.7014+0.37	—19 00 49.2	11.856—3.22	2	1
188	1404	1908.4	35 02.78	2.2916+0.21	—35 55 09.2	11.855—2.74	2	2
189	1407	1908.6	35 41.81	2.7027+0.37	—18 54 16.6	11.808—3.23	2	1
190	1410	1908.6	36 06.16	3.0420+0.76	— 1 37 29.4	11.779—3.04	2	1

			3 36 35.55				1	1
			37 59.47	2.0773+0.67			1	1
	1421		37 48.77	2.8053+0.45			1	1
		1908.6	38 26.70	2.0228+0.32	- 22 25 36.2		1	1
			40 27.42		- 22 14 02.1	11.400 -3.10	1	1
	1440	1908.6	3 40 32.84	+2.7041+0.38	- 18 34 48.2	+11.403—3.29	1	1
	1441	1907.1	40 44.10	2.9881+0.68	— 4 54 [illegible]		1	1
		1908.6	40 52.94	2.6057+0.37	—18 56 46.5		1	1
			41 28.05	2.9006+0.60	— 4 16 46.8		2	2
	1461		43 53.13	2.7404+0.41	- 16 42 03.7		2	1
		1908.6	3 50 14.32	+2.6442+0.36	-20 47 51.8	+10.757—3.30	1	1
		1908.6	57 48.49	2.8779+0.54	2 39 03.9		1	1
	Nova		4 02 27.98	2.6153+0.36	- 21 29 42.8	0.840—3.36	3	1
			03 57.23	2.6166+0.30	- 21 19 03.9		1	1
205		1906.6	09 35.69		—12 59 31.8	9.291—3.66	2	1
		1908.6	4 09 46.92	+2.3350+0.30	31 53 50.2	+ 9.276—3.06	1	1
		1906.6	15 12 29	3.0532+0.60	— 0 55 58.1		1	1
			19 19.96	3.0520+0.67	— 0 58 37.5	8.527—4.06	3	1
			21 19.45	2.9010+0.60	— 3 59 50.0	8.370—4.00	1	1
		1908.1	25 57.36		— 6 01 00.8	8.000—3.97	1	1
		1906.6	4 26 43.94	+2.9588+0.57	—.5 18 03.8		1	1
		1906.6	27 47.62	2.9740+0.58	— 4 35 06.6	7.851—4.03	1	1
		1906.6	28 08.60	2.9756+0.58	— 4 30 30.4	7.822—4.03	1	1
		1906.6	29 12.01	2.8820+0.50	— 8 47 19.0	[illegible]	1	1
215	1622	1907.4	31 36.70	2.9902+0.58	3 23 32.6		1	1
			4 32 06.55	+2.9967+0.57	— 3 30 21.4	+ 7.502—4.00	2	1
	1628		32 39.80	2.9660+0.56	— 4 54 57.9	7.458—4.06	2	1
	1635		35 02.16	3.0565+0.62	— 0 44 37.7	7.250—4.10	1	2
			35 51.87	2.8795+0.49	8 48 10.1		1	1
		1906.6	36 27.43	3.0061+0.58	— 3 03 05.2		2	1
			4 36 33.79	+3.0290+0.58	2 00 06.0		1	1
		1906.6	39 35.39	2.8801+0.48	— 8 43 08.0	6.891—3.98	1	1
		1907.4	40 45.84	3.0161+0.56	2 34 33.8		2	2
224			41 33.54	2.9033+0.53	— 4 58 19.7		2	2
	1667		43 43.99	2.9288+0.49	6 29 46.1		1	1
		1907.6	4 46 56.11	+2.9309+0.50	— 5 58 18.7		1	1
	1684	1907.8	47 31.29	3.0000+0.52	— 3 16 27.1	6.237—4.19	3	1
		1906.7	52 00.35	2.9603+0.49	— 5 01 23.7	5.861—4.15	1	1
		1906.7	53 48.93	3.0583+0.53	— 0 38 31.8	5.706—4.30	2	1
			53 54.38	2.5931+0.34	—20 31 06.5		2	1
			4 54 28.60	+3.0634+0.53	— 0 24 45.2	+ 5.656—4.31	2	2
			54 31.81	2.8922+0.44	— 8 00 38.6	5.650—4.07	2	1
			54 52.66	2.8945+0.44	7 54 29.8	5.620—4.08	1	1
			55 01.10	2.7053+0.38	—15 58 23.0	5.606—3.82	1	1
		1926.6	5 00 31.78		— 9 17 05.6	5.145—4.06	1	1
			5 00 47.46	+2.7978+0.39	—12 00 33.3	+ 5.122—3.96	1	1
237		1906.8	01 56.25	2.9938+0.47	— 3 29 14.5	5.026—4.25	1	2
			02 39.07	2.2608+0.31	—32 05 14.2	4.966—3.21	2	1
		1907.6	07 33.04	2.7041+0.35	—15 48 33.3	4.549—3.86	1	1
			09 23.59	2.8252+0.38	—10 44 38.1		1	1

	N. G. C. No.	Epoch.	R. A. 1900.	Precession 1900 + t	Decl. 1900	Precession 1900 + t	No. of Nights.	No. of Stars.
			H. M. S.	S.	° ′ ″	″		
241	1888	1907.1	5 17 54.64	+2.8030+0.34t	11 35 40.5	+3.663—4.03t	3, 4	2
242	1904	1906.7	20 04.37	2.4693+0.29	—24 37 00.1	3.473—3.56	3	2
243	1924	1906.7	23 07.39	2.9480+0.36	— 5 23 38.7	3.212—4.26	3	2
244	1964	1907.6	29 08.30	2.5371+0.28	22 00 58.5	2.692—3.68	2	1
245	1990	1908.6	31 33.94	2.9150+0.31	— 6 46 44.9	2.481—4.23	2	2
246	2076	1907.7	5 42 20.44	+2.6000—0.20t	—16 49 07.9	+1.544—3.88t	2	1
247	2089	1907.7	43 26.53	2.6489+0.20	—17 38 11.8	1.447—3.85	2	1
248	2110	1906.7	47 21.72	2.8074+0.25	— 7 28 52.5	+1.105—4.22	2	1
249	2179	1908.1	6 03 48.36	2.5399+0.20	—21 43 58.2	0.334—3.70	3	1
250	2183	1907.7	05 54.43	2.9277+0.17	— 6 11 32.7	0.518—4.27	2	1
251	2196	1907.1	6 07 56.08	+2.5389+0.19	—21 46 55.7	— 0.694—3.69	3	1
252	2206	1906.6	12 00.59	2.4003+0.20	—26 43 52.3	1.048—3.49	2	1
253	2207	1906.6	12 07.09	2.5513+0.18	—21 20 17.8	1.071—3.71	2	1
254	2211	1907.7	14 08.12	2.6264+0.17	—18 29 51.4	1.236—3.82	2	1
255	2217	1906.6	17 41.11	2.3880+0.19	—27 11 11.1	1.546—3.47	2	1
256	2223	1906.6	6 20 24.74	+2.5135+0.17	—22 47 02.7	1.700—3.65	2	1
257	2207	1906.6	37 08.36	2.2350+0.15	—32 23 20.0	3.233—3.21	2	1
258	2272	1906.8	38 42.29	2.3907+0.14	27 21 52.1	3.370—3.42	3	1
259	2271	1906.8	38 43.06	2.5031+0.13	23 22 40.2	3.371—3.58	3	1
260	2293	1906.7	43 41.65	2.4141+0.14	—26 38 37.4	3.708—3.44	2	1
261	Big	1906.6	6 44 11.47	+2.6768+0.10	—16 47 24.5	— 3.843—3.81	2	1
262	2313	1906.8	53 13.46	2.8942—0.01	— 7 48 43.9	4.614—4.09	2	2
263	2316	1906.8	54 51.78	2.8985—0.02	— 7 38 19.1	4.755—4.08	2	2
264	2325	1906.6	58 43.79	2.3690+0.12	—28 33 06.5	5.081—3.32	2	1
265	2380	1907.5	7 19 52.80	2.4233+0.11	—27 20 02.8	6.849—3.29	3	2
266	2377	1907.7	7 20 11.58	+2.8635—0.07	— 9 27 25.1	— 6.875—3.89	2	1
267	2438	1907.7	37 15.21	2.7576—0.03	—14 30 00.7	8.258—3.63	2	1
268	2440	1906.7	37 27.57	2.6776+0.02	—17 58 26.5	8.273—3.52	2	1
269	2452	1907.7	43 20.84	2.4574+0.10	—27 05 15.8	8.730—3.19	2	1
270	2501	1907.7	53 52.56	2.7779—0.05	—14 05 00.2	9.558—3.52	2	1
271	2566	1908.2	8 14 31.09	+2.5492+0.12	—25 11 13.9	11.104—3.05	3	1
272	Nova	1906.6	18 28.36	2.9843—0.29	— 4 35 40.1	11.391—3.53	2	2
273	2610	1908.2	28 45.70	2.7713—0.02	—15 48 30.1	12.122—3.16	3	1
274	2613	1907.7	28 59.80	2.6291+0.11	—22 37 55.1	12.137—3.00	2	1
275	2612	1906.7	29 07.39	2.8304—0.00	—12 50 01.3	12.144—3.23	2	1
276	2615	1906.8	8 29 30.54	+3.0318—0.37	2 12 12.6	12.173—3.45	2	2
277	2616	1907.2	30 30.03	3.0451—0.39	1 30 17.5	12.242—3.46	3	1
278	2617	1908.5	30 39.07	3.0034—0.33	3 44 42.5	12.252—3.30	2	2
279	2642	1908.2	35 45.16	3.0042—0.33	3 46 10.0	12.602—3.35	3	1
280	2663	1907.7	41 08.48	2.3996+0.29	—33 25 48.5	12.965—2.61	2	1
281	2665	1906.6	8 41 28.62	+2.7233+0.08	18 56 16.1	—12.988—2.97	2	1
282	2690	1907.7	47 35.17	3.0340—0.38	— 2 13 34.0	13.390—3.23	2	1
283	2695	1907.3	49 24.76	3.0263—0.36	— 2 41 13.4	13.500—3.24	2	1
284	2697	1907.3	49 57.06	3.0278—0.37	2 36 27.7	13.544—3.19	2	1
285	2698	1906.9	50 34.45	3.0246—0.36	— 2 48 08.2	13.585—3.18	3	1
286	2699	1907.3	8 50 46.81	+3.0256—0.36	— 2 44 43.2	13.597—3.18	2	1
287	2708	1906.7	51 06.53	3.0217—0.35	— 2 58 41.0	13.619—3.18	2	1
288	2706	1906.7	51 09.55	3.0353—0.38	2 10 52.2	13.622—3.19	2	1
289	2717	1906.7	52 38.28	2.6325+0.22	—24 17 21.3	13.716—2.73	2	1
290	1312	1907.7	53 45.17	3.0163—0.34	— 3 19 22.3	13.787—3.13	2	1

No.	[illegible] No.	[illegible]	R. A. [illegible]	[illegible]	[illegible]	[illegible]	No. of [illegible]	[illegible]
[illegible]	[illegible]	[illegible]	8 53 57.38	[illegible]	—4 39 53.5	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	9 02 04.39	[illegible]	15 05 57.9	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	06 44.26	[illegible]	— 14 24 27.8	14.580—2.77	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	07 52.35	[illegible]	—23 45 45.6	[illegible]	[illegible]	1
[illegible]	2811	[illegible]	11 29.69	[illegible]	—15 53 47.0	[illegible]	[illegible]	1
[illegible]	[illegible]	[illegible]	9 11 51.08	[illegible]	23 12 59.6	—14.894—2.57	[illegible]	[illegible]
[illegible]	[illegible]	1906.7	16 38.46	[illegible]	11 29 03.4	[illegible]	[illegible]	1
[illegible]	[illegible]	[illegible]	18 59.37	[illegible]	— 22 43 58.2	15.308—2.49	[illegible]	[illegible]
[illegible]	2876	[illegible]	20 16.48	[illegible]	—6 17 06.6	15.376—2.72	[illegible]	[illegible]
[illegible]	2884	1906.8	21 34.35	[illegible]	—11 07 35.2	15.448—2.62	[illegible]	1
[illegible]	[illegible]	[illegible]	9 22 22.43	[illegible]	—11 12 39.7	[illegible]	[illegible]	1
[illegible]	2902	1907.8	26 06.81	2.8608+0.08	—14 17 47.7	15.609—2.53	2	1
[illegible]	[illegible]	[illegible]	26 53.71	2.8306+0.15	—16 17 41.0	[illegible]	2	1
[illegible]	[illegible]	1907.8	29 23.04	[illegible]	— 2 03 35.5	15.875—2.64	[illegible]	1
[illegible]	[illegible]	[illegible]	30 26.72	[illegible]	15 57 11.8	[illegible]	2	1
[illegible]	Nova	1909.2	9 31 16.53	+2.9011+0.02	—11 59 26.5	[illegible]	[illegible]	1
[illegible]	2935	[illegible]	32 08.16	[illegible]	—20 40 50.3	[illegible]	[illegible]	1
[illegible]	[illegible]	1906.8	37 30.79	[illegible]	— 3 14 35.8	[illegible]	[illegible]	1
[illegible]	[illegible]	[illegible]	38 15.23	[illegible]	9 55 31.6	[illegible]	[illegible]	1
310	[illegible]	[illegible]	38 17.25	2.9478—0.05	— 9 09 27.1	16.340—2.42	[illegible]	[illegible]
[illegible]	[illegible]	1907.3	9 38 22.32	+2.9461—0.05	9 17 17.3	[illegible]	[illegible]	1
[illegible]	[illegible]	1908.7	39 01.99	2.7916+0.32	—20 01 10.4	[illegible]	[illegible]	1
[illegible]	[illegible]	1906.8	39 38.20	2.7805+0.34	— 20 49 12.9	[illegible]	[illegible]	1
[illegible]	[illegible]	[illegible]	40 42.78	[illegible]	—17 54 48.5	16.462—2.28	2	1
[illegible]	[illegible]	1908.5	40 53.59	2.8844+0.12	13 51 59.1	16.472—2.32	3	1
[illegible]	[illegible]	[illegible]	9 41 00.10	[illegible]	—13 54 31.5	—16.477—2.32	[illegible]	1
[illegible]	[illegible]	1907.3	44 38.56	[illegible]	— 4 42 02.1	16.656—2.37	2	1
[illegible]	3028	1908.7	45 12.26	2.8214+0.43	—18 43 03.8	16.682—2.22	[illegible]	1
[illegible]	[illegible]	[illegible]	46 54.11	[illegible]	—32 17 05.7	16.765—2.02	[illegible]	1
[illegible]	[illegible]	1907.5	46 56.42	[illegible]	— 6 21 14.3	[illegible]	3	[illegible]
[illegible]	[illegible]	1908.7	9 49 28.70	+2.7083+0.59	—26 48 55.7	—16.886—2.05	[illegible]	1
[illegible]	[illegible]	[illegible]	49 55.31	[illegible]	—25 13 53.4	16.908—2.08	[illegible]	1
[illegible]	[illegible]	1907.3	50 03.71	[illegible]	—27 49 32.7	[illegible]	2	1
[illegible]	[illegible]	1908.7	53 52.25	[illegible]	—26 27 00.4	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	1906.9	55 31.15	2.8327+0.38	19 09 24.6	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	9 56 15.44	+2.6568+0.77	—31 11 00.2	[illegible]	2	[illegible]
[illegible]	[illegible]	1906.8	59 02.02	[illegible]	— 5 59 28.3	[illegible]	[illegible]	1
[illegible]	[illegible]	1907.6	10 00 15.46	2.9880—0.06	— 7 14 00.2	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	1907.8	05 16.44	2.9370+0.15	—11 56 38.1	[illegible]	4	1
[illegible]	3200	1906.8	13 47.85	2.8845+0.42	—17 28 53.5	[illegible]	[illegible]	1
[illegible]	[illegible]	1907.9	10 14 55.71	+2.7816+0.75	26 11 49.9	[illegible]	3	1
[illegible]	[illegible]	1908.9	17 06.53	2.6848+1.05	—33 45 48.1	18.065—1.56	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	19 57.01	2.8876+0.47	—18 08 05.9	[illegible]	[illegible]	1
334	[illegible]	1908.7	25 29.94	[illegible]	—34 48 48.2	[illegible]	2	1
335	[illegible]	[illegible]	25 56.07	2.7012+1.17	—34 50 48.4	[illegible]	[illegible]	1
[illegible]	[illegible]	[illegible]	10 28 54.32	+2.8098+0.90	—26 56 19.1	[illegible]	2	1
[illegible]	Nova	1907.3	30 32.68	3.0223+0.00	5 39 41.2	[illegible]	[illegible]	1
[illegible]	3309	1907.5	31 53.63	2.8173+0.93	—27 00 03.6	18.589—1.46	[illegible]	[illegible]
[illegible]	3375	1906.8	42 00.98	2.9987+0.23	9 24 53.5	18.902—1.37	2	[illegible]
[illegible]	[illegible]	[illegible]	43 36.02	[illegible]	—24 38 05.7	[illegible]	[illegible]	1

No.	N. G. C. No.	Epoch.	R. A. 1900.	Precession 1900 + t	Decl. 1900	Precession 1900 + t	No. of Nights.	No. of Stars.
			H. M. S.	S.	° ′ ″	″		
341	3411	1906.7	10 45 28.11	+2.9704+0.37t	−12 18 59.2	−19.001−1.32t	3	1
342	3508	1907.3	58 02.40	2.9720+0.63	−15 45 03.4	19.324−1.07	3	1
343	3511	1908.9	58 31.05	2.9256+0.95	−22 32 52.7	19.335−1.04	3, 2	1
344	3528	1907.3	11 02 22.02	2.9586+0.81	−18 55 53.1	19.421−1.00	2	1
345	3537	1908.8	03 25.24	3.0168+0.36	− 9 42 59.7	19.444−0.99	2	1
346	3557	1908.8	11 05 13.36	+2.8342+1.75	−36 59 52.5	−19.482−0.90	2	1
347	3571	1907.3	06 32.68	2.9738+0.77	−17 44 47.1	19.509−0.91	2	1
348	3585	1906.9	08 24.41	2.9258+1.21	−26 12 38.8	19.546−0.87	2	1
349	3591	1906.9	09 03.00	3.0017+0.58	−13 32 32.0	19.559−0.88	2	1
350	3597	1908.8	09 46.85	2.9482+1.06	−23 11 03.8	19.572−0.85	2	1
351	3617	1909.0	11 12 56.41	+2.9422+1.22	−25 35 18.0	−19.631−0.79	3	2
352	3621	1908.8	13 25.47	2.9021+1.58	−32 16 11.7	19.639−0.77	2	1
353	3630	1906.7	15 22.27	3.0283+0.43	− 9 44 02.8	19.674−0.78	2	1
354	3637	1906.7	15 36.69	3.0287+0.44	− 9 42 35.3	19.678−0.77	2	1
355	3661	1908.8	18 36.69	3.0160+0.63	−13 16 56.5	19.726−0.71	2	1
356	3667	1908.8	11 19 15.10	+3.0168+0.63	−13 18 32.0	−19.736−0.70	2	1
357	3672	1906.8	19 58.53	3.0340+0.44	− 9 14 46.5	19.747−0.68	2	1
358	3693	1908.8	23 09.12	3.0247+0.63	−12 38 39.2	19.794−0.62	2	1
359	3706	1908.8	24 51.31	2.9253+1.93	−35 50 23.6	19.817−0.57	2	1
360	3707	1908.8	25 01.39	3.0332+0.58	−10 59 42.0	19.819−0.59	2	1
361	3715	1906.5	11 26 29.76	+3.0253+0.70	−13 40 47.9	−19.838−0.55	2	3
362	3717	1908.0	26 35.52	2.9617+1.57	−29 45 22.3	19.839−0.54	3	1
363	3723	1908.8	27 26.76	3.0413+0.49	− 9 25 02.1	19.850−0.54	2	1
364	3732	1906.8	29 09.63	3.0434+0.50	− 9 17 37.7	19.871−0.51	2	1
365	Nova	1908.8	34 00.98	3.0403+0.49	− 8 47 39.8	19.923−0.42	2	1
366	3783	1908.8	11 34 05.01	+2.9583+2.05	−37 11 05.0	−19.924−0.40	2	1
367	3791	1908.8	34 36.74	3.0498+0.50	− 8 48 47.8	19.929−0.41	2	1
368	3818	1908.0	36 51.49	3.0595+0.35	− 5 36 05.4	19.950−0.36	2	2
369	3823	1908.8	37 10.81	3.0413+0.75	−13 18 44.7	19.953−0.36	2	1
370	3831	1908.8	38 13.79	3.0450+0.71	−12 19 25.7	19.962−0.34	2	1
371	3836	1908.8	11 38 26.22	+3.0361+0.92	−16 14 37.5	−19.963−0.32	2	1
372	3865	1908.8	39 46.49	3.0547+0.53	− 8 40 42.7	19.974−0.31	2	1
373	3885	1908.8	41 44.60	3.0177+1.57	−27 21 59.9	19.989−0.26	2	1
374	3887	1906.9	42 00.06	3.0420+0.94	−16 18 02.8	19.990−0.27	2	1
375	3892	1906.8	42 55.61	3.0544+0.63	−10 24 26.0	19.996−0.25	2	2
376	3904	1906.8	11 44 10.43	+3.0222+1.60	−28 43 17.4	−20.004−0.22	2	1
377	3923	1907.7	45 58.19	3.0288+1.66	−28 14 58.5	20.014−0.19	2	2
378	3952	1908.8	48 33.79	3.0687+0.31	− 3 26 27.1	20.027−0.14	2	1
379	3955	1908.8	48 52.13	3.0457+1.35	−22 36 32.0	20.029−0.13	2	1
380	3962	1906.9	49 34.05	3.0582+0.83	−13 25 09.7	20.031−0.11	2	1
381	3967	1908.8	11 50 03.90	+3.0653+0.51	− 7 17 12.6	−20.033−0.11	2	1
382	3979	1907.9	50 53.85	3.0707+0.25	− 2 09 52.5	20.036−0.09	2	1
383	4006	1908.8	52 59.07	3.0716+0.23	1 33 49.3	20.042−0.05	2	1
384	Nova	1908.8	53 25.01	3.0604+1.10	−17 47 27.0	20.044−0.04	2	1
385	4027	1908.8	54 23.81	3.0616+1.16	−18 42 36.0	20.046−0.02	2	1
386	4030	1908.8	11 55 16.99	+3.0724+0.19	− 0 32 38.8	−20.048−0.01	2	1
387	4033	1906.9	55 27.95	3.0645+1.08	−17 17 08.7	20.048−0.01	2	2
388	4038	1907.4	56 46.81	3.0665+1.16	−18 18 36.2	20.050+0.02	2	1
389	4070	1908.8	59 43.18	3.0728+0.29	1 49 30.7	20.052+0.08	2	1
390	4087	1908.8	12 00 27.53	3.0740+1.64	25 57 53.2	20.052+0.10	2	1

No.									No.	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
401	4198	[illegible]	12	03	32.48	[illegible]	—	29 32 14.4	[illegible]	1
402	4199	[illegible]			[illegible]	[illegible]	—	29 32 44.5	20.052 ± 0.12	1
403	4200	[illegible]		03	45.62	[illegible]	—	8 28 49.1	20.049 ± 0.16	1
404	[illegible]	[illegible]			[illegible]	[illegible]	—	9 28 46.3	[illegible]	1
405	4203	[illegible]		14	33.24	[illegible]	—	11 40 13.9	[illegible]	1
406	4206	[illegible]	12	18	11.12	[illegible]	—	12 00 16.5	[illegible]	1
407	4208	[illegible]		18	40.14	3.0782 ± 0.45	—	2 53 16.9	[illegible]	1
408	4209	[illegible]		19	19.47	[illegible]	—	18 13 50.0	19.981 ± 0.46	1
409	4211	[illegible]		21	23.51	3.0880 ± 0.68	—	7 07 52.8	19.968 ± 0.50	1
410	4214	[illegible]		21	07.94	3.0881 ± 0.68	—	7 07 39.0	[illegible]	1
411	4217	[illegible]	12	22	03.66	+ 3.0846 ± 0.58	—	5 16 37.1	[illegible]	1
412	4218	1907.9		22	19.04	3.0901 ± 0.71	—	7 36 52.5	[illegible]	1
413	4433	1907.9		22	29.39	3.0905 ± 0.71	—	7 43 31.8	[illegible]	1
414	4454	[illegible]		23	43.30	3.0700 ± 0.30	—	1 23 12.8	[illegible]	1
415	4455	[illegible]		24	07.66	3.1312 ± 1.00	—	22 36 50.1	[illegible]	2
416	4457	[illegible]	12	25	55.21	+ 3.0926 ± 0.74	—	7 30 08.7	[illegible]	1
417	4457	[illegible]		30	21.23	3.0827 ± 0.53	—	3 14 30.0	19.876 ± 0.67	1
418	4461	[illegible]		34	10.62	[illegible]	—	26 11 41.1	19.829 ± 0.77	1
419	4503	[illegible]		34	30.47	3.0805 ± 0.63	—	4 47 41.9	[illegible]	1
420	4504	[illegible]		34	47.92	3.1123 ± 0.07	—	11 04 26.5	[illegible]	1
421	4604	[illegible]	12	35	27.94	+ 3.0892 ± 0.62	—	4 35 04.4	—19.813 ± 0.77	3
422	4608	1907.9		37	15.27	3.0971 ± 0.74	—	6 25 21.9	19.788 ± 0.81	2
423	4658	[illegible]		39	26.04	[illegible]	—	9 32 08.1	[illegible]	2
424	4663	[illegible]		39	35.42	3.1118 ± 0.92	—	9 39 01.6	19.754 ± 0.86	2
425	4666	1908.3		40	01.20	3.0724 ± 0.41	—	0 05 07.2	19.747 ± 0.86	1
426	4671	1907.9	12	40	37.52	+ 3.0996 ± 0.76	—	6 31 23.6	—19.738 ± 0.89	2
427	4674	[illegible]		42	09.29	3.0820 ± 0.53	—	2 10 52.4	19.714 ± 0.90	2
428	4677	1908.8		42	48.19	3.0775 ± 0.49	—	1 06 36.5	19.703 ± 0.92	2
429	4681	[illegible]		43	05.25	3.0849 ± 0.57	—	2 47 12.3	19.698 ± 0.92	2
430	4687	[illegible]		43	26.21	[illegible]	—	5 15 20.0	[illegible]	2
431	4690	[illegible]	12	43	51.15	+ 3.1089 ± 0.86	—	8 07 09.3	—19.686 ± 0.95	2
432	4709	1906.9		43	55.58	3.1216 ± 1.01	—	10 51 55.0	[illegible]	2
433	4714	[illegible]		45	05.61	3.1320 ± 1.13	—	12 46 48.5	19.665 ± 0.98	2
434	4716	[illegible]		45	21.59	3.1139 ± 0.01	—	8 54 24.1	19.661 ± 0.98	2
435	4717	[illegible]		45	23.16	3.1140 ± 0.01	—	8 55 08.8	19.660 ± 0.98	2
436	4734	1907.9	12	45	39.48	[illegible]	—	13 47 15.6	[illegible]	2
437	4737	1907.9		45	43.49	3.1377 ± 1.19	—	13 47 17.5	19.654 ± 1.00	2
438	[illegible]	1908.8		46	18.51	[illegible]	—	12 47 09.1	19.644 ± 1.00	2
439	4739	1907.9		46	25.80	3.1099 ± 0.85	—	7 51 56.1	19.642 ± 0.99	2
440	4742	1907.4		46	35.96	3.1199 ± 0.98	—	9 54 37.5	19.639 ± 1.01	2
441	4753	1907.9	12	47	14.83	+ 3.0758 ± 0.48	—	0 39 22.6	[illegible]	2
442	4755	1908.9		47	37.87	3.1459 ± 1.26	—	14 52 14.1	19.621 ± 1.03	1
443	4757	1908.9		47	37.93	3.1202 ± 0.97	—	9 46 00.2	19.621 ± 1.02	2
444	4759	1908.9		47	52.80	3.1149 ± 0.90	—	8 39 24.2	19.616 ± 1.02	2
445	4760	1908.9		47	54.11	3.1149 ± 0.90	—	8 39 39.5	19.616 ± 1.02	2
436	4760	1907.4	12	47	54.81	+ 3.1213 ± 0.98	—	9 57 03.2	[illegible]	2
437	4771	1908.9		48	20.11	3.1170 ± 0.93	—	8 59 55.2	[illegible]	2
438	4773	[illegible]		48	24.60	3.1126 ± 0.88	—	8 05 46.5	19.607 ± 1.03	2
439	4775	1907.9		48	35.47	[illegible]	—	6 04 48.1	19.603 ± 1.04	2
440	4781	1907.3		49	11.21	3.1229 ± 0.99	—	9 59 40.1	19.592 ± 1.05	1

	N. G. C. No.		R. A. 1900	Precession 1900 + t	Decl. 1900	Precession 1900 + t	No. of Nights.	No. of Stars
			H. M. S.	S.	° ′ ″	″		
441	4786	1906.9	12 49 21.58	+3.1043+0.791	- 6 19 00.6	—19.580—1.041	2	2
442	4782	1907.9	49 22.07	3.1335+1.10	12 00 59.0	19.580—1.05	2	1
443	4783	1907.9	49 22.07	3.1339+1.10	—12 01 44.1	19.589+1.05	2	1
444	4818	1907.9	51 37.43	3.1146+0.89	— 7 59 01.4	19.546—1.10	2	1
445	4825	1908.9	51 58.06	3.1428—1.18	—13 07 24.9	19.539+1.11	2	1
446	4830	1908.9	12 52 09.56	+3.1775—1.55	—19 09 01.6	—19.535+1.13	2	1
447	4856	1907.9	54 05.90	3.1536+1.27	—14 30 07.0	19.496+1.16	2	1
448	4860	1907.9	55 29.39	3.0955+0.70	— 4 03 53.0	19.467—1.18	2	1
449	4867	1908.9	55 38.11	3.1442—1.18	—12 54 41.7	19.464—1.19	2	1
450	4869	1909.3	55 41.51	3.1493+1.21	—13 24 19.6	19.463+1.19	2	1
451	4902	1907.9	12 55 43.99	+3.1528+1.25	—13 57 44.7	—19.462+1.20	2	2
452	4915	1907.9	56 18.50	3.0955+0.69	— 4 00 29.5	19.450+1.16	2	1
453	4928	1908.9	57 48.39	3.1169+0.89	— 7 32 51.9	19.418+1.22	2	1
454	4933	1907.9	58 42.60	3.1383+1.09	—10 57 34.2	19.398+1.24	2	1
455	4939	1907.9	59 00.67	3.1315+1.03	— 9 48 13.9	19.391+1.24	2	1
456	4941	1908.9	12 59 02.67	+3.1026+0.76	— 5 00 54.4	—19.388+1.23	2	1
457	4951	1907.4	59 56.72	3.1088+0.82	— 5 57 28.3	19.370+1.25	3	1
458	4958	1906.9	13 00 36.74	3.1186+0.91	— 7 29 06.2	19.355+1.28	2	2
459	4981	1906.9	03 36.97	3.1128+0.85	— 6 14 37.2	19.284+1.34	2	1
460	4984	1907.9	03 39.87	3.1708+1.34	—14 58 58.3	19.283+1.36	2	1
461	4989	1908.9	13 04 05.37	+3.1041+0.77	— 4 51 46.5	—19.273+1.33	2	1
462	4995	1907.4	04 28.34	3.1202+0.91	— 7 18 01.0	19.264+1.34	2	1
463	4997	1907.4	04 33.46	3.1791+1.42	—15 58 55.6	19.262+1.38	2	1
464	5018	1907.4	07 39.94	3.2065+1.62	—18 59 14.3	19.184+1.45	2	1
465	5038	1908.9	09 42.96	3.1831+1.30	—15 25 21.4	19.131+1.47	2	1
466	5044	1907.9	13 10 04.73	+3.1870+1.42	—15 51 22.5	—19.122+1.48	2	2
467	5048	1908.9	10 38.91	3.2873+2.28	—27 52 56.3	19.106+1.53	2	1
468	5061	1906.9	12 36.40	3.2786+2.16	—26 18 35.5	19.054+1.57	2	1
469	5077	1907.0	14 15.22	3.1642+1.22	—12 07 52.8	19.009+1.54	2	2
470	5078	1907.4	14 20.57	3.2887+2.21	—26 53 05.2	19.007+1.60	2	1
471	5084	1906.9	13 14 51.88	+3.2400+1.80	—21 18 09.5	—18.991+1.60	2	1
472	5087	1908.9	15 01.52	3.2299+1.73	—20 05 10.5	18.987+1.59	2	1
473	5101	1907.1	16 15.90	3.2945+2.22	—26 54 21.6	18.952+1.64	2	2
474	5102	1908.9	16 17.01	3.3013+3.07	—36 06 21.9	18.952+1.69	2	1
475	5111	1908.9	17 39.15	3.1708+1.26	—12 26 29.3	18.912+1.62	2	1
476	5119	1907.4	13 18 43.00	+3.1664+1.22	—11 45 11.7	—18.881+1.64	2	1
477	5122	1907.5	18 59.39	3.1534+1.13	—10 07 54.4	18.873+1.63	2	1
478	5134	1907.9	19 53.59	3.2445+1.78	—20 36 52.7	18.846+1.70	2	1
479	5135	1909.1	20 10.37	3.3300+2.44	—29 18 48.1	18.838+1.75	3	1
480	5140	1908.9	21 20.29	3.1698+1.23	—11 48 11.1	18.803+1.69	2	1
481	5170	1908.9	13 24 26.38	+3.2241+1.58	—17 26 57.4	—18.707+1.77	2	2
482	5193	1908.9	26 13.18	3.3882+2.77	—32 43 09.6	18.650+1.90	2	1
483	5203	1908.9	26 58.67	3.1447+1.06	— 8 16 15.5	18.625+1.78	2	1
484	5211	1906.9	27 57.50	3.0772+0.66	— 0 31 19.0	18.593+1.76	2	1
485	5232	1907.9	30 53.30	3.1452+1.05	7 59 13.7	18.496+1.85	2	1
486	5239	1907.9	13 31 23.23	+3.3646+2.48	—29 21 24.6	—18.479+1.97	2	1
487	5247	1908.9	32 38.97	3.2372+1.60	—17 22 29.2	18.436+1.93	2	1
488	5253	1907.4	34 15.49	3.3956+2.65	—31 08 00.1	18.380+2.06	3	2
489	5266	1908.9	43 56.85	3.1418+1.02	— 6 43 35.3	18.025+2.08	2	1
490	5324	1908.9	46 52.43	3.1312+0.98	— 5 33 45.2	17.911+2.13	2	1

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
			h m s		° ′ ″			
[illegible]	[illegible]	[illegible]	13 47 12.03	[illegible]	—27 59 48.8	—17.807+2.30t	[illegible]	1
[illegible]	[illegible]	[illegible]	48 [illegible]	[illegible]	[illegible]	17.820+2.18	[illegible]	1
[illegible]	5345	[illegible]	49 [illegible]	[illegible]	[illegible]	17.823+2.14	2	1
[illegible]	[illegible]	[illegible]	51 [illegible]	[illegible]	— 4 58 49.8	[illegible]	2	1
[illegible]	[illegible]	[illegible]	57 40.04	[illegible]	[illegible]	17.462+2.50	2	1
[illegible]	[illegible]	[illegible]	13 58 10.56	[illegible]	[illegible]	[illegible]	[illegible]	1
[illegible]	[illegible]	1907.4	58 12.10	[illegible]	— 5 32 59.4	[illegible]	3	2
[illegible]	5403	1906.0	14 06 16.13	[illegible]	— 4 34 23.9	17.085+2.45	[illegible]	1
499	[illegible]	[illegible]	06 30.09	3.0800+0.80	[illegible] 0 40 19.1	[illegible]	[illegible]	1
500	[illegible]	1907.4	08 03.42	[illegible]	— 2 44 19.5	17.003+2.48	3	1
[illegible]	[illegible]	[illegible]	14 08 08.86	+3.1059+0.80	— 2 40 49.5	[illegible]	[illegible]	1
[illegible]	5534	[illegible]	12 23.70	3.1617+1.10	— 6 57 18.5	16.798+2.58	[illegible]	1
[illegible]	5595	[illegible]	18 43.04	[illegible]	—16 16 08.5	16.400+2.80	[illegible]	1
[illegible]	5604	1907.5	19 31.52	3.1095+0.92	— 2 45 32.6	[illegible]	[illegible]	1
[illegible]	[illegible]	1907.0	24 22.28	[illegible]	[illegible] 5 31 49.1	16.204+2.77	[illegible]	1
506	[illegible]	1907.0	14 32 46.39	+3.0729+0.82	+ 0 02 08.8	—15.760+2.83	[illegible]	1
[illegible]	[illegible]	1907.0	33 47.27	[illegible]	—26 06 25.9	[illegible]	[illegible]	2
[illegible]	[illegible]	1906.9	36 47.20	3.2002+1.20	— 8 34 53.0	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	1907.0	36 50.47	3.3283+1.64	—16 49 32.9	[illegible]	[illegible]	2
[illegible]	Nova	1907.8	40 11.74	[illegible]	—11 23 15.2	[illegible]	3	1
511	[illegible]	1907.0	14 42 03.69	[illegible]	—14 26 04.0	[illegible]	[illegible]	1
[illegible]	[illegible]	[illegible]	42 09.12	[illegible]	—18 39 37.3	[illegible]	2	1
[illegible]	[illegible]	1909.0	53 07.07	[illegible]	—18 51 58.4	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	1907.0	53 14.13	3.0837+0.87	[illegible] 0 41 19.5	[illegible]	[illegible]	1
515	[illegible]	1909.0	53 49.71	3.3402+1.57	—16 13 26.8	[illegible]	[illegible]	1
[illegible]	5809	[illegible]	14 55 21.94	[illegible]	—13 46 06.3	—14.462+3.40	3	1
517	[illegible]	[illegible]	55 36.58	[illegible]	[illegible] 7 03 37.4	[illegible]	2	1
[illegible]	[illegible]	1909.0	57 50.34	3.6732+2.71	—32 40 34.7	14.311+3.81	[illegible]	1
[illegible]	[illegible]	[illegible]	15 02 47.63	3.2545+1.28	—10 45 30.3	14.005+3.46	[illegible]	2
[illegible]	[illegible]	1906.0	03 23.19	3.2561+1.28	10 49 31.6	[illegible]	[illegible]	2
[illegible]	[illegible]	[illegible]	15 03 50.34	[illegible]	10 56 31.6	[illegible]	[illegible]	1
[illegible]	[illegible]	[illegible]	05 09.21	[illegible]	—18 03 05.6	[illegible]	[illegible]	1
[illegible]	5872	[illegible]	05 28.94	3.2625+1.29	—11 06 03.2	[illegible]	2	1
[illegible]	5878	[illegible]	08 13.75	3.3148+1.41	—13 53 45.0	13.661+3.60	[illegible]	1
[illegible]	5883	[illegible]	09 37.37	3.3225+1.42	—14 14 40.9	13.572+3.63	2	1
[illegible]	[illegible]	[illegible]	15 10 46.33	+3.2671+1.28	—11 07 28.8	[illegible]	[illegible]	1
[illegible]	[illegible]	[illegible]	12 22.08	3.5101+1.95	—23 43 54.8	13.393+3.86	2	1
[illegible]	[illegible]	[illegible]	12 44.98	3.5101+1.94	—23 42 11.3	[illegible]	3	1
[illegible]	[illegible]	1906.5	15 44.54	3.1117+0.90	— 2 13 00.0	[illegible]	2	1
[illegible]	[illegible]	1906.0	16 02.40	3.3006+1.33	—12 43 53.7	[illegible]	[illegible]	1
[illegible]	[illegible]	1906.0	15 16 07.00	+3.3022+1.34	—12 48 33.2	—13.148+3.69	2	1
[illegible]	[illegible]	1906.5	16 12.48	3.1970+1.09	— 7 01 03.2	[illegible]	2	1
533	5937	1906.0	25 34.46	[illegible]	— 2 29 13.3	12.512+3.61	2	1
[illegible]	5959	1906.8	31 43.22	[illegible]	—16 15 59.1	12.087+3.99	2	2
535	5995	1906.5	42 51.01	3.3368+1.26	—13 26 57.2	[illegible]	2	1
[illegible]	6000	1906.5	15 43 39.91	+3.7060+1.97	—29 04 53.0	—10.502+4.66	2	1
537	6072	[illegible]	16 06 25.05	3.9262+2.30	—35 58 18.6	[illegible]	2	1
[illegible]	[illegible]	[illegible]	11 04.83	[illegible]	22 43 39.1	9.175+4.66	2	1
539	[illegible]	1907.0	26 55.57	3.3526+0.97	—12 50 26.5	7.021+4.53	2	1
[illegible]	[illegible]	[illegible]	42 06.02	3.0747+0.60	— 0 05 44.3	[illegible]	3	1

	N. G. C. No.	Epoch.	R. A. 1900.	Precession 1900 + t	Decl. 1900	Precession 1900 + t	No. of Nights.	No. of Stars
			H. M. S.	S.	° ′ ″	″		
541	6235	1906.0	16 47 26.02	+3.5862 + 1.07 t	—22 00 38.6	— 6.244+4.99 t	2	1
542	6266	1906.5	54 51.33	3.8125+1.22	—29 57 53.3	5.624+5.37	2	2
543	6273	1906.3	56 27.06	3.7032+1.08	26 07 24.1	5.489+5.21	3	2
544	6284	1906.0	58 22.06	3.6635 + 1.01	—24 37 29.7	5.328 +5.17	2	1
545	6287	1906.0	59 08.18	3.6089+0.93	—22 34 10.5	5.263+5.10	2	1
546	6293	1905.8	17 03 58.15	+3.7182+0.98	26 27 19.5	- 4.852+5.28	2	3
547	6302	1906.0	06 59.16	4.0527+1.28	—36 58 58.1	4.597+5.77	2	1
548	6304	1906.0	08 11.46	3.8052+1.01	—29 20 44.9	4.494+5.43	2	1
549	6309	1906.0	08 27.38	3.3687 +0.05	—12 47 34.2	4.474+4.81	2	1
550	6316	1907.0	10 20.49	3.7077 +0.93	—28 01 38.1	4.312+5.38	2	1
551	6325	1907.0	17 11 54.47	+3.6455 +0.80	23 39 27.4	4.178+5.22	2	1
552	6333	1907.0	13 20.91	3.5084+0.69	—18 24 39.0	4.053+5.02	2	1
553	6342	1907.0	15 16.67	3.5307 +0.69	19 29 12.4	3.888+5.07	2	1
554	6356	1907.0	17 45.27	3.4925+0.63	—17 43 03.5	3.676 +5.02	2	1
555	6355	1907.0	17 46.55	3.7212+0.77	—26 15 33.0	3.673 +5.35	2	1
556	6360	1907.0	17 23 15.59	+3.6515+0.67	—23 40 37.1	3.202+5.27	2	1
557	6402	1907.2	32 21.68	3.1466+0.37	— 3 11 06.1	2.412+4.57	2, 3	1
558	6401	1907.0	32 30.88	3.6505+0.53	—23 51 07.6	2.390+5.31	2	1
559	6440	1907.0	42 56.35	3.5666+0.38	—20 19 36.7	1.490+5.10	2	1
560	6445	1907.0	43 19.40	3.5573 +0.38	—19 58 36.3	1.457 +5.17	2	1
561	6441	1907.0	17 43 24.91	+4.0777+0.52	—37 01 08.4	1.448 +5.93	2	1
562	6453	1908.0	44 12.47	3.9017+0.40	—34 34 11.0	1.381—5.82	2	1
563	6517	1907.0	56 22.33	3.2834+0.21	— 8 57 24.9	0.318+4.79	2	1
564	6522	1907.0	57 10.69	3.8454+0.21	—30 02 08.7	0.246 +5.61	2	1
565	6528	1907.0	58 25.47	3.8464+0.19	—30 03 36.5	0.138 +5.61	2	1
566	6535	1908.9	17 58 42.78	+3.0801+0.20	— 0 17 57.7	— 0.112 +4.49	2	1
567	6539	1907.5	59 24.82	3.0905+0.19	— 7 35 26.7	0.051+4.74	2	1
568	6540	1908.9	59 51.68	3.7767 +0.22	—27 46 20.2	— 0.012+5.51	2	1
569	6544	1909.0	18 01 10.50	3.6963+0.15	—25 00 29.5	+ 0.102 +5.39	2	1
570	6553	1909.0	03 05.08	3.7224+0.11	—25 55 29.2	0.270 +5.43	2	1
571	6558	1907.5	18 03 47.72	+3.9008+0.08	—31 46 50.8	+ 0.332 +5.60	2	1
572	6569	1909.0	07 08.67	3.9030+0.03	—31 51 08.6	0.626 +5.69	2	1
573	6624	1907.1	17 15.31	3.8551 -0.14	—30 24 38.0	1.509+5.60	2	1
574	6626	1907.1	18 24.11	3.6919—0.09	—24 55 16.6	1.608+5.36	2	1
575	6629	1909.0	19 37.83	3.6452—0.09	—23 15 29.8	1.716 +5.20	2	1
576	6638	1907.1	18 24 45.38	+3.7085—0.19	—25 33 55.3	+ 2.163 +5.36	2	1
577	6637	1908.0	24 51.99	3.9166—0.30	—32 25 00.5	2.171 +5.66	2	1
578	6642	1907.2	25 49.53	3.6513—0.19	—23 32 40.5	2.255 +5.28	2	1
579	6652	1907.2	29 12.61	3.9359—0.39	—33 04 08.0	2.548 +5.68	2	1
580	6681	1907.2	36 42.17	3.9098—0.53	—32 23 16.9	3.199+5.61	2	1
581	6712	1907.2	18 47 37.48	+3.2758—0.19	- 8 49 41.5	+ 4.136 +4.65	2	1
582	6715	1908.1	48 39.20	3.8456—0.68	—30 36 17.7	4.225 +5.46	2	1
583	6717	1909.0	49 03.97	3.6227—0.47	—22 49 39.0	4.260 +5.14	2	1
584	Big	1909.0	49 05.16	3.6227—0.47	—22 49 26.8	4.262+5.14	2	1
585	6723	1909.0	52 49.02	4.0452—0.97	—36 46 00.6	4.580 +5.72	2	1
586	6751	1907.1	19 00 34.63	+3.2116—0.24	6 08 39.0	+ 5.230 +4.50	2	1
587	6772	1909.0	09 23.38	3.1369—0.23	— 2 52 39.3	5.078 +4.34	2	1
588	6778	1907.2	13 14.02	3.1121—0.23	— 1 46 37.8	6.299 +4.28	2	1
589	6814	1907.2	37 11.42	3.2997—0.57	—10 33 33.9	8.250+4.35	2	1
590	6818	1907.2	38 19.63	3.3846—0.69	—14 23 26.0	8.342+4.45	2	1

No.	N. G. C.							
			h m s		° ′ ″			
				S.				
			19 48 [illegible]		12 49 41.1		1	1
			21 [illegible]		22 12 22.8	10.040 +4.44	1	1
593			[illegible]		— 9 23 43.3	10.005 +4.07	1	1
			19 08 [illegible]		25 08 00.5		2	1
		1907.2	22 32.89		— 3 24 25.7		1	1
			20 28 07.23	+3.7479—2.10	32 19 22.1	+12.077+4.32	1	1
	6844	1907.2	33 44.09	3.1703—0.63	— 5 19 27.3	12.464 +3.56	1	1
		1907.2	42 12.21	[illegible]	0 02 45.4		2	1
		1908.2	43 19.17	[illegible]	— 8 43 43.5	13.100+3.51	1	1
			47 58.41	[illegible]	12 54 52.7		2	1
	7000	1907.2	20 58 44.48	[illegible]	—11 45 33.7			1
	7047	1907.2	21 11 18.32	[illegible]	— 1 14 38.5		1	1
		1907.2	22 55.93	3.1035—0.54	— 2 04 55.8	15.524+2.80	1	1
			28 18.28	3.0908—0.40	1 15 51.4	15.817+2.71	2	2
	7000		34 41.15	[illegible]	—23 37 56.1	16.154+2.88	1	1
			21 39 39.85	[illegible]	4 04 47.1	+16.409+2.55	1	1
			43 31.15	3.2519—1.08	13 26 17.8	16.600+2.58	2	1
		1908.2	55 38.87	[illegible]	—13 45 01.0	17.172+2.36	2	1
		1907.2	56 12.22	3.5082—2.48	—32 21 08.1	17.197+2.56	2	1
610		1907.2	56 13.10	3.5098—2.40	—32 27 18.6	17.198+2.56	2	1
		1907.2	21 56 18.79	[illegible]	—32 28 20.5	+17.202+2.56	2	1
	7080	1907.2	56 45.86	[illegible]	21 01 47.0		2	1
			56 51.18	[illegible]	—19 24 00.0	17.226+2.40	3	1
		1907.4	57 07.12	[illegible]	—21 17 45.6	17.238+2.42	3	1
		1907.2	57 24.40	3.3337—1.55	—20 57 14.8	17.251+2.42	2	1
		1907.2	22 04 45.36	[illegible]	—17 09 03.9	+17.570+2.22	1	1
		1907.2	07 30.22	3.3889—1.96	—26 38 31.6	17.684+2.25	2	1
			08 46.97	[illegible]	—17 34 15.4	[illegible]	2	1
			12 06.86	3.3456—1.76	24 13 53.3	17.871+2.14	2	1
620			15 03.10	[illegible]	16 16 35.3	[illegible]	2	1
			22 15 11.00	[illegible]	—25 10 54.0	+17.991+2.08	1	2
			17 24.68	3.1195—0.55	4 37 33.2	[illegible]	2	3
	Big	1907.0	18 47.76	3.1185—0.54	— 4 34 48.4	[illegible]	5	2
624	7284		23 04.50	3.3327—1.82	25 21 16.0	18.285+1.92	3	1
			23 05.08	3.1052—0.46	— 3 23 41.1	18.286 +1.78	2	1
			22 27 03.43	+3.2105—1.06	—14 38 04.8	+18.425+1.77	2	1
			29 03.90	3.1719—0.83	—10 52 23.7	18.494+1.71	2	1
			29 13.48	3.1961—0.98	—13 27 01.3	18.499+1.72	2	1
			30 14.43	3.3279—1.89	—26 34 11.7	18.534+1.77	2	1
		1907.4	34 25.29	3.1124—0.49	4 40 46.5	18.670+1.58	1	1
			22 36 15.53	+3.1141—0.49	— 4 58 03.7	+18.733+1.54	1	1
			39 16.74	3.0782—0.26	6 41 14.9	[illegible]	2	1
633			39 46.57	[illegible]	—20 28 36.6	18.836+1.55	1	1
		1908.3	40 47.76	[illegible]	11 31 38.4	18.867+1.49	2	1
			42 22.68	3.2598—1.56	— 22 50 20.4	[illegible]	2	2
			22 42 31.75	+3.1697—0.88	—12 20 41.6	[illegible]	2	1
637			45 27.66	3.0882—0.31	— 2 04 29.8	19.091+1.37	1	1
			46 25.27	3.2358—1.42	21 08 17.0	19.028+1.42	2	1
639			46 27.02	3.1177—0.51	— 6 05 15.8	19.028+1.36	2	2
			50 30.45	[illegible]	— 6 01 43.2	[illegible]	1	2

No.	N. G. C. No.	Epoch.	R. A. 1900.	Precession 1900 + t	Decl. 1900	Precession 1900 + t	No. of Nights.	Sta
			H. M. S.	S.	° ′ ″	″		
641	7428	1907.3	22 52 11.65	+3.0835—0.25t	+ 1 34 59.9	+19.181+1.23t	2	1
642	7443	1908.3	54 53.54	3.1616—0.89	—13 20 38.0	19.248+1.23	2	1
643	7444	1908.3	54 53.72	3.1617—0.89	—13 22 18.9	19.249+1.23	2	1
644	7450	1908.3	55 32.57	3.1616—0.89	—13 27 17.3	19.264+1.20	2	1
645	7453	1907.3	56 13.95	3.1171—0.51	— 6 53 40.6	19.280+1.17	2	1
646	7484	1908.3	23 01 33.71	+3.3250—2.66	—36 48 55.7	+19.404+1.24	2	1
647	7500	1906.5	06 32.62	3.0873—0.24	+ 2 42 11.7	19.500+0.94	2	2
648	7507	1906.3	06 44.20	3.2439—1.01	—29 05 00.3	19.513+1.00	2	1
649	7513	1908.3	07 50.20	3.2392—1.90	—28 54 01.8	19.535+0.09	2	1
650	7521	1908.3	08 27.07	3.0845—0.21	+ 2 16 31.4	19.547+0.92	2	1
651	7550	1908.3	23 10 36.14	+3.0873—0.23	— 2 55 36.0	+19.588+0.88	2	1
652	7576	1907.3	12 13.55	3.0982—0.34	— 5 16 25.6	19.618+0.86	2	1
653	7585	1906.6	12 52.04	3.0975—0.34	— 5 11 47.7	19.630+0.84	4	2
654	7600	1907.8	13 43.27	3.1110—0.49	— 8 07 38.0	19.645+0.82	3	1
655	7603	1908.3	13 49.80	3.0751—0.08	+ 0 18 13.1	19.647+0.81	2	1
656	7606	1906.6	23 13 53.51	+3.1152—0.54	— 9 01 52.1	+19.648+0.82	2	2
657	7665	1908.3	22 04.19	3.1113—0.55	— 9 56 10.1	19.778+0.66	2	1
658	7701	1906.1	29 23.32	3.0833—0.16	— 3 24 27.2	19.874+0.52	3	2
659	7709	1906.4	30 15.22	3.1265—0.93	+17 15 31.5	19.883+0.51	2	1
660	7710	1907.4	30 38.04	3.0829—0.15	+ 3 26 01.2	19.888+0.48	2	1
661	7716	1908.3	23 31 24.43	+3.0734+0.02	— 0 15 20.5	+19.896+0.47	2	1
662	7717	1908.3	32 32.34	3.1175—0.82	—15 40 20.0	19.908+0.44	2	1
663	7721	1906.3	33 39.95	3.0917—0.33	— 7 04 15.7	19.920+0.42	2	1
664	7723	1906.3	33 46.35	3.1094—0.70	—13 30 57.0	19.921+0.43	2	2
665	7727	1906.5	34 43.81	3.1063—0.64	—12 50 51.9	19.930+0.41	4	2
666	7746	1908.3	23 40 12.33	+3.0772—0.04	— 2 14 23.5	+19.977+0.30	2	1
667	7759	1908.8	43 44.97	3.1018—0.84	—17 05 46.8	20.002+0.23	3	1
668	7783	1907.2	49 03.15	3.0729+0.12	— 0 10 32.0	20.029+0.13	3	1
669	Appen.	1908.3	54 03.63	3.0735—0.09	— 4 41 02.0	20.045+0.03	2	1